Si 5

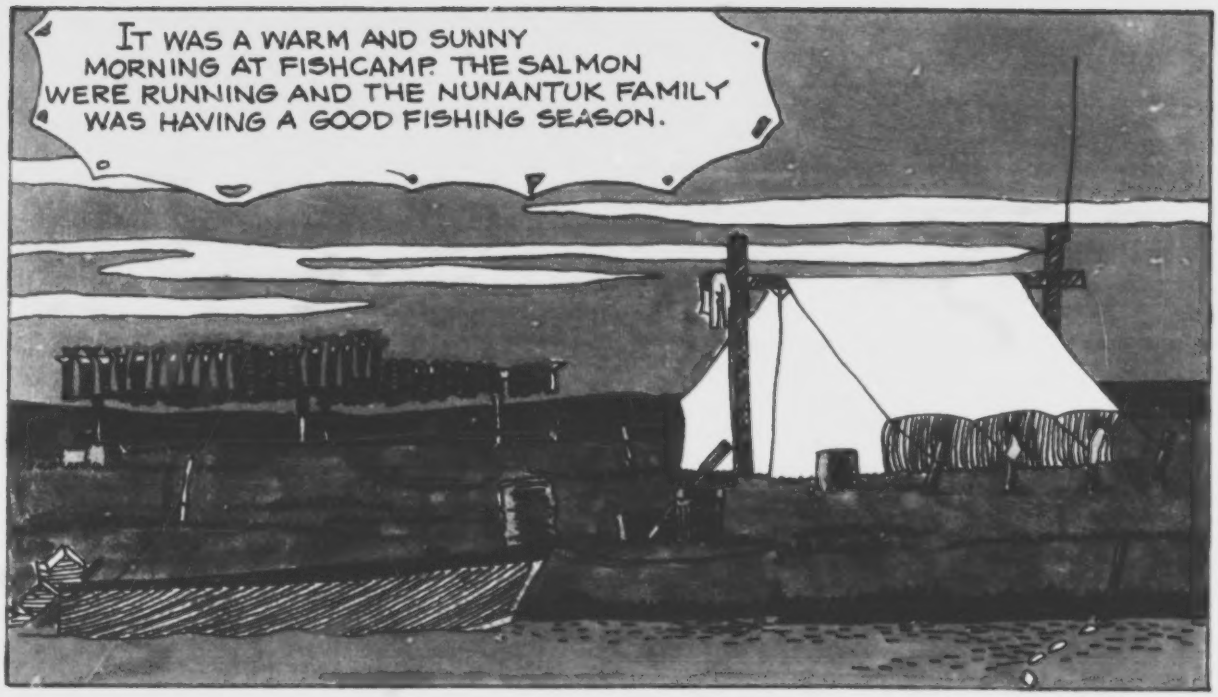
THE ADVENTURE

of

Simon & Mary Numantuk

THE STORY OF WILDLIFE MANAGEMENT

on the YUKON - KUSKOKWIM DELTA


IT WAS A WARM AND SUNNY MORNING AT FISHCAMP. THE SALMON WERE RUNNING AND THE NUNANTUK FAMILY WAS HAVING A GOOD FISHING SEASON.

THE DAY BEGAN AS USUAL. LITTLE DID SIMON AND MARY SUSPECT THE ADVENTURES THAT AWAITED THEM.
TIME TO GET UP!
GOOD MORNING AP'A

WE'RE GOING UP RIVER TO CHECK THE NETS. WHY DON'T YOU KIDS GO OUT AND GET SOME FIREWOOD?

WHILE LOOKING FOR FIREWOOD, SIMON AND MARY EXPLORE THE FAR SIDE OF THE HILL, WHEN...

...ON A DISTANT LAKE, THEY SEE SOMETHING GOING ON.

ALA-I! WHAT IS HAPPENING?

I DON'T KNOW. LET'S LEAVE THE WOOD AND GO SEE WHAT IT IS.

HIDING IN THE BRUSH, THEY WATCH IN AMAZEMENT AS TWO FLOATPLANES HERD FLIGHTLESS GEESE INTO A NET.

AS THE MEN CLOSE THE NET...

AREN'T THEY...

YAH, ITS THOSE FISH AND WILDLIFE GUYS WHO VISITED OUR CAMP LAST WEEK. I WONDER WHAT THEY ARE DOING TO THE GEESE?

THE U.S. FISH AND WILDLIFE SERVICE **BIOLOGISTS** BOB MARSHALL AND FRED ELUK RECOGNIZE THEM...

IS THAT YOU SIMON AND MARY? IT'S GOOD TO SEE YOU AGAIN. WE ARE **BANDING** GEESE TODAY. DO YOU WANT TO HELP?

THEY ARE A LITTLE AFRAID AT FIRST, BUT SOON LEARN THAT FISH AND WILDLIFE WORK CAN BE FUN.

THIS ONE IS FAST!

II-I

BANDING GIVES US IMPORTANT INFORMATION ABOUT THE BIRDS. WITH IT WE CAN BETTER PROTECT AND MANAGE THEM.

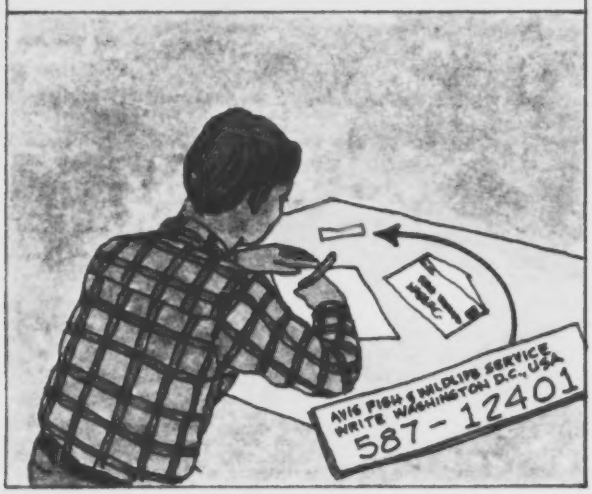
BUT HOW DOES BANDING WORK?

EACH **BAND** HAS A NUMBER THAT MARKS THE BIRD...

1240

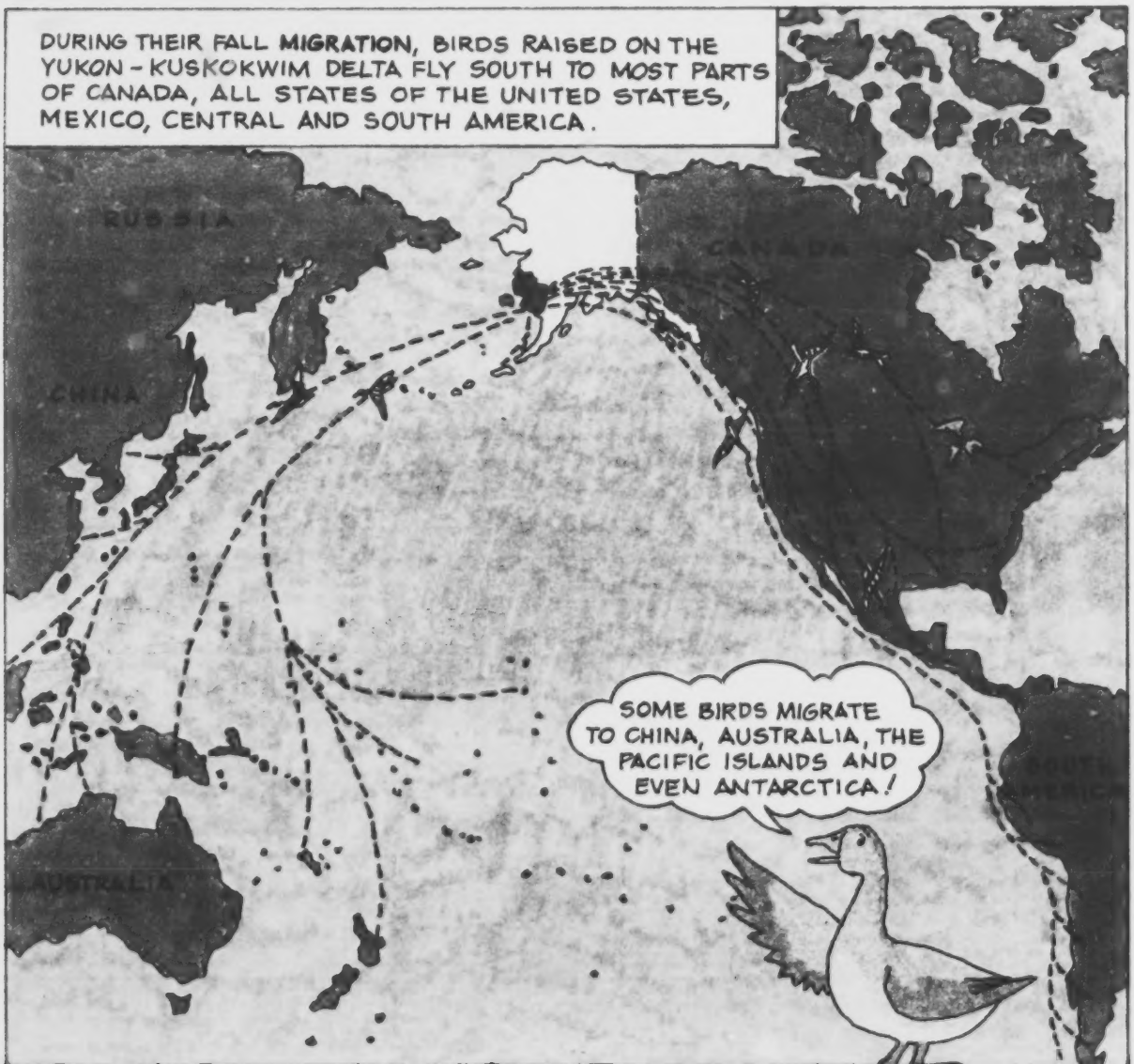
SO THE BIRD CAN BE IDENTIFIED

HUNTERS AND OTHERS WHO FIND BIRDS WITH BANDS SEND THE BAND NUMBERS TO THE U.S. FISH AND WILDLIFE SERVICE. THEN WE CAN LEARN WHERE THE BIRD HAS TRAVELLED.



BANDING STUDIES HAVE PROVIDED US WITH INTERESTING INFORMATION. FOR EXAMPLE...

DURING THEIR FALL **MIGRATION**, BIRDS RAISED ON THE YUKON - KUSKOKWIM DELTA FLY SOUTH TO MOST PARTS OF CANADA, ALL STATES OF THE UNITED STATES, MEXICO, CENTRAL AND SOUTH AMERICA.



SOME BIRDS NEST IN OTHER AREAS, BUT USE THE DELTA FOR RESTING AND FEEDING DURING **MIGRATION**.

SNOW GEESE SPEND TWO WEEKS HERE DURING THEIR JOURNEY FROM WRANGEL ISLAND, RUSSIA, TO THE SOUTHERN STATES.

WE HAVE LEARNED THAT FOUR GENERAL MIGRATION ROUTES, CALLED **FLYWAYS**, ARE USED IN NORTH AMERICA.

PACIFIC FLYWAY

MISSISSIPPI FLYWAY

CENTRAL FLYWAY

ATLANTIC FLYWAY

ALL FOUR FLYWAYS ARE USED BY BIRDS FROM THE DELTA...

... BUT MOST USE THE PACIFIC **FLYWAY**.

MANY **WATERFOWL**, SUCH AS THE CACKLING CANADA GOOSE, WINTER IN THE MARSHES OF CALIFORNIA.

CALIFORNIA

IN LATE APRIL THE CRACKLERS BEGIN THEIR 3000 MILE FLIGHT NORTH.

THOSE THAT SURVIVE STORMS, PREDATORS, ELECTRIC WIRES, DISEASE AND OTHER HAZARDS DURING MIGRATION...

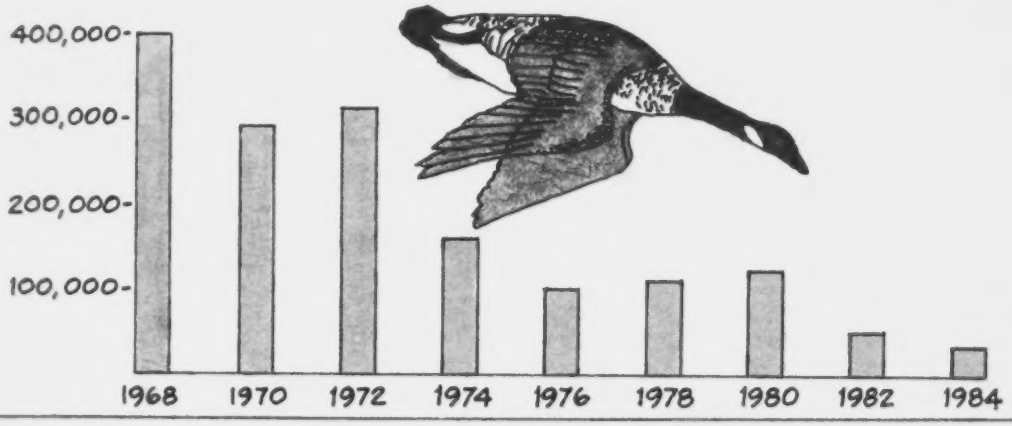
... ARRIVE ON THE DELTA THREE WEEKS LATER TO NEST AND RAISE YOUNG.
BUT, IF THE BIRDS LIVE HERE IN THE SUMMER, AND DOWN SOUTH IN THE WINTER, WHO DO THEY BELONG TO?
THEY ARE SHARED BY EVERYONE!
THAT'S RIGHT MARY. EVERYONE SHOULD HAVE THE CHANCE TO ENJOY AND USE THEM.
AND WE ALL HAVE THE RESPONSIBILITY OF CONSERVING THEM - SO THERE WILL BE BIRDS FOR PEOPLE IN THE FUTURE.
AP-A SAID THERE WERE MANY BIRDS WHEN HE WAS YOUNG. NOW, HE SAYS THAT THERE ARE NOT AS MANY GEESE AND DUCKS AS BEFORE.

YOUR AP'A IS RIGHT. SOME KINDS OF **WATERFOWL** HAVE GONE DOWN IN NUMBER. THEIR POPULATIONS ARE MUCH SMALLER NOW THAN IN THE PAST.

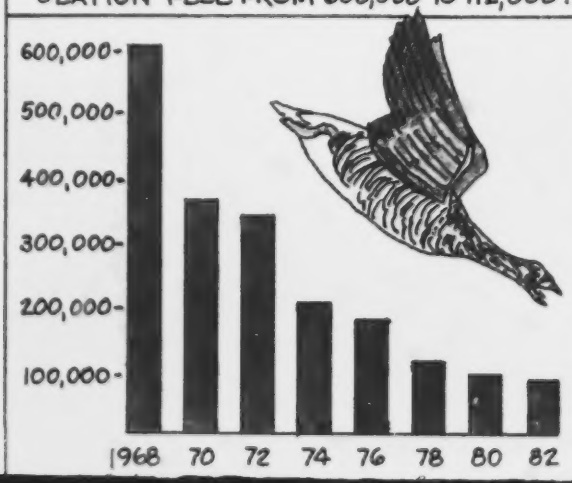
HOW ABOUT THE CACKLING CANADA GOOSE?

IN 1968 THERE WERE ABOUT 400,000 CACKLERS

BUT BY 1984 THERE WERE ONLY ABOUT 27,000



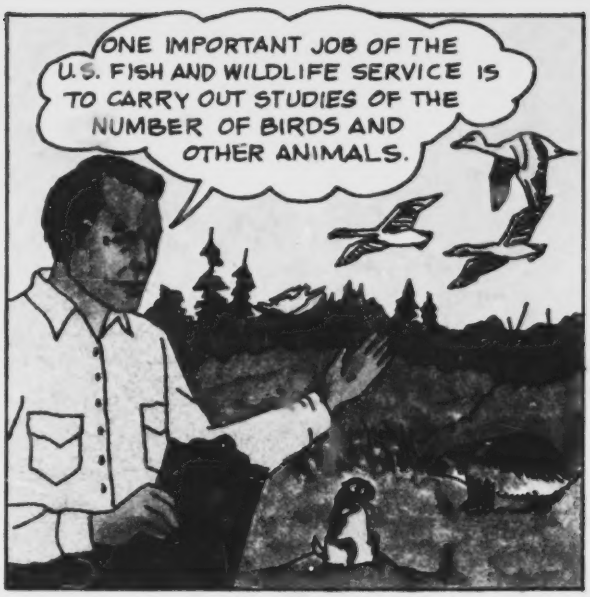
DURING THE SAME TIME, THE PACIFIC FLYWAY WHITE-FRONTED GOOSE POPULATION FELL FROM 600,000 TO 112,000.



AND THE NUMBER OF BLACK BRANT HAS ALSO GONE DOWN

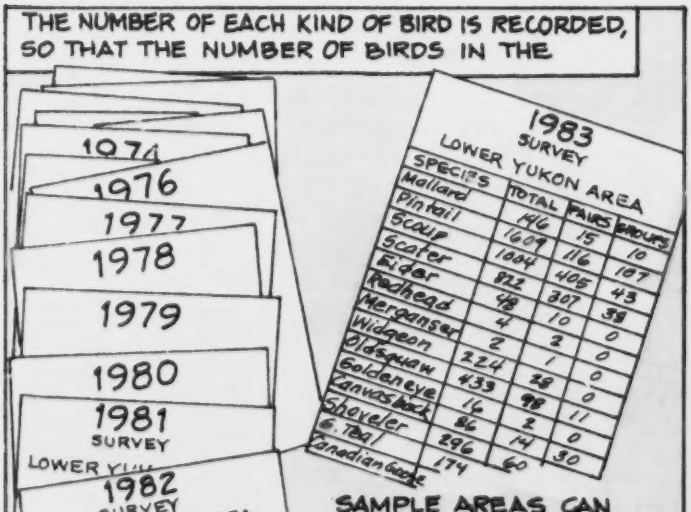
READEX FICHE

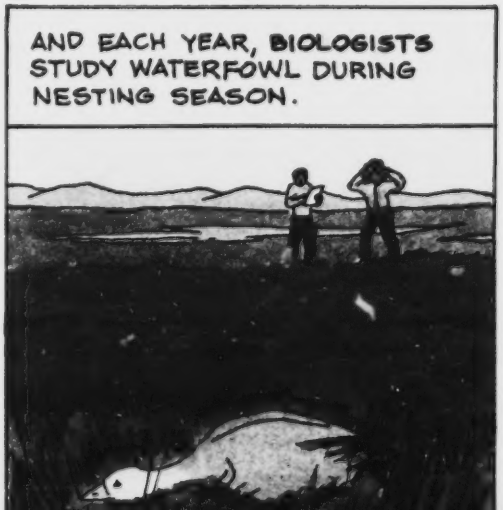
BUT HOW DO YOU KNOW HOW MANY BIRDS THERE ARE?
ALA-I, THAT'S A LOT LESS GEESE.


ONE IMPORTANT JOB OF THE U.S. FISH AND WILDLIFE SERVICE IS TO CARRY OUT STUDIES OF THE NUMBER OF BIRDS AND OTHER ANIMALS.

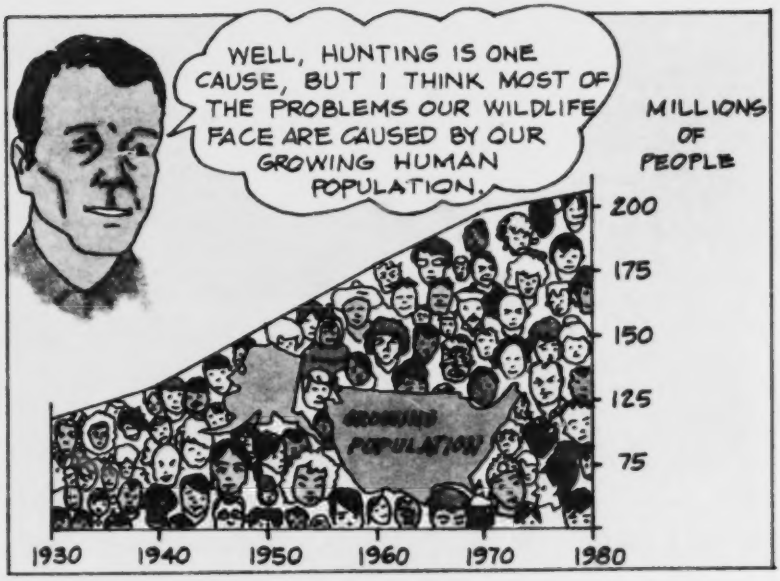
EARLY EACH SPRING WE COUNT WATERFOWL BY AIRPLANE.

THIS IS DONE IN THE MOST IMPORTANT NESTING AREAS OF THE DELTA.
COUNT AREAS

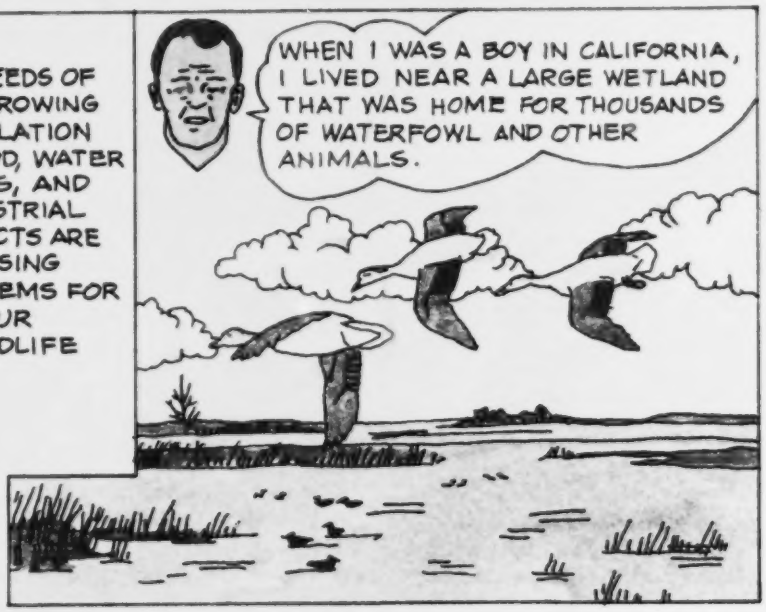

THE NUMBER OF EACH KIND OF BIRD IS RECORDED, SO THAT THE NUMBER OF BIRDS IN THE
1974
1976
1977
1978
1979
1980
1981 SURVEY
1982
1983 SURVEY
LOWER YUKON AREA
SPECIES TOTAL PAIRS GROUPS
Mallard 146 15 10
Pintail 1609 116 187
Scaup 1004 405 43
Scoter 873 367 38
Eider 48 10 0
Redhead 4 3 0
Merganser 2 1 0
Widgeon 224 28 0
Oldsquaw 433 98 0
Goldeneye 16 2 11
Canvasback 86 14 0
Shoveler 296 60 30
& Teal 174
Canadian Goose
SAMPLE AREAS CAN


AND EACH YEAR, BIOLOGISTS STUDY WATERFOWL DURING NESTING SEASON.

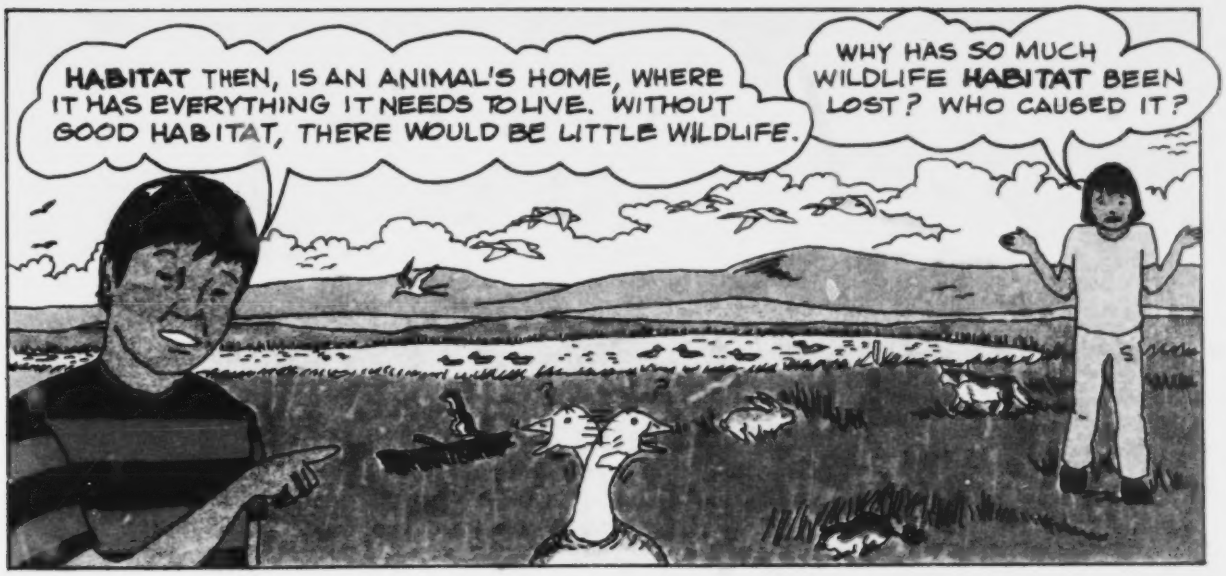
THEY LEARN ABOUT THE NUMBER OF EGGS LAID-
AND HOW MANY YOUNG LIVE TO BECOME ADULTS.
BIOLOGISTS ALSO STUDY THE THINGS THAT CAUSE THE LOSS OF EGGS AND YOUNG.
WEATHER
PREDATORS
AFTER THEY LEAVE ALASKA, MANY KINDS OF WATERFOWL ARE COUNTED IN THEIR WINTERING AREAS IN THE LOWER 48.
COUNTING IS DONE FROM THE GROUND AND FROM THE AIR.
SO WE HAVE MANY WAYS OF LEARNING ABOUT THE POPULATIONS OF THE BIRDS ON THE YUKON-KUSKOKWIM DELTA.



THE NEEDS OF OUR GROWING POPULATION FOR FOOD, WATER HOMES, AND INDUSTRIAL PRODUCTS ARE CAUSING PROBLEMS FOR OUR WILDLIFE



BUT NOW NEARLY HALF OF THAT AREA HAS BEEN DEVELOPED FOR FARMS, ROADS AND BUILDINGS LEAVING MUCH LESS HABITAT- FOOD, WATER, SPACE AND COVER - FOR WILDLIFE.


HABITAT THEN, IS AN ANIMAL'S HOME, WHERE IT HAS EVERYTHING IT NEEDS TO LIVE. WITHOUT GOOD HABITAT, THERE WOULD BE LITTLE WILDLIFE.
WHY HAS SO MUCH WILDLIFE HABITAT BEEN LOST? WHO CAUSED IT?

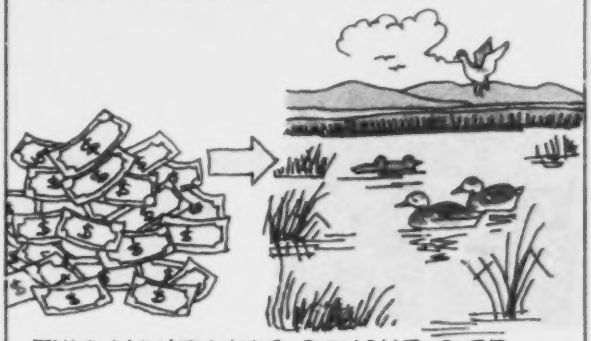
I THINK ALL OF US ARE PARTLY RESPONSIBLE, BECAUSE THE PRODUCTS WE USE REQUIRE DEVELOPMENT OF LAND, TAKING HABITAT FROM WILDLIFE.
TO GROW OUR FOOD...
RICE
CORN FLAKES
TO MAKE VEHICLES...
AND PRODUCE FUEL...
GAS
STOVE OIL
TO BUILD HOUSES...
WE CAN ALL HELP WILDLIFE BY NOT WASTING MATERIALS THAT COME FROM THE LAND.

TODAY HABITAT IS RECEIVING PROTECTION. MANY FEDERAL AND STATE LAWS HAVE BEEN PASSED TO PROTECT LAND AND WATER.
COASTAL ZONE MANAGEMENT ACT

AND MANY IMPORTANT HABITAT AREAS HAVE BEEN SET ASIDE AS WILDLIFE REFUGES - WHERE ACTIVITIES HARMFUL TO WILDLIFE ARE STRICTLY CONTROLLED.
NATIONAL WILDLIFE REFUGE

WATERFOWL HUNTERS HELP BUY LAND FOR WILDLIFE BY BUYING DUCK STAMPS WITH THEIR HUNTING LICENSES.

OVER THE YEARS HUNTERS HAVE PAID OVER $285,000,000. FOR DUCK STAMPS.



THIS MONEY HAS BOUGHT OVER 2½ MILLION ACRES OF NEEDED HABITAT IN THE LOWER 48.

IT'S IMPORTANT THAT HUNTERS HELP PROTECT HABITAT. MAYBE THEY SHOULD ALSO BE CAREFUL NOT TO CATCH TOO MANY BIRDS.
YES, THAT IS IMPORTANT, BECAUSE TODAY THERE IS LESS HABITAT AND FEWER BIRDS – BUT MORE HUNTERS.

MANY YEARS AGO, IN THE LOWER 48, PEOPLE BECAME WORRIED ABOUT THE LOWER NUMBERS OF WATERFOWL. THEY KNEW UNLESS THERE WAS A **LIMIT** ON HOW MANY BIRDS PEOPLE COULD CATCH, NONE WOULD BE LEFT FOR THE FUTURE.

PEOPLE WANTED THE GOVERNMENT TO HELP, AND THE AGENCY THAT BECAME THE **U.S. FISH AND WILDLIFE SERVICE** BEGAN TO HELP WATERFOWL.

U.S. FISH & WILDLIFE SERVICE

DEPARTMENT OF THE INTERIOR

I CALL IT THE U.S. FISH AND FEATHERS!

BUT THE BIRDS NEEDED PROTECTION IN OTHER COUNTRIES THEY MIGRATED THROUGH TOO...

WE ALL NEED TO WORK **TOGETHER**

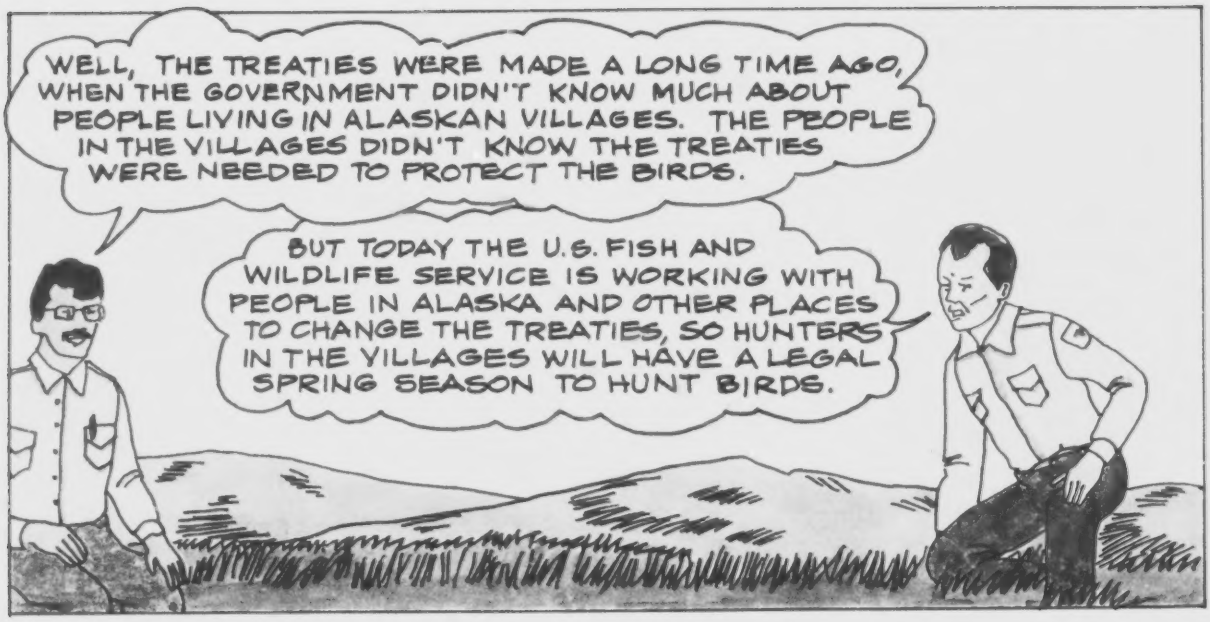
SO THE UNITED STATES SIGNED AGREEMENTS WITH CANADA, MEXICO, AND OTHER COUNTRIES TO PROTECT THE BIRDS.

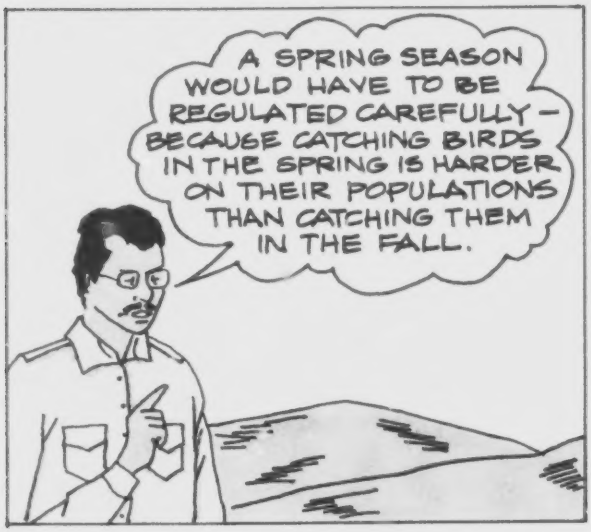
THE AGREEMENTS ARE CALLED THE MIGRATORY BIRD TREATIES. IN THE TREATIES THE COUNTRIES AGREED NOT TO ALLOW HUNTING IN THE SPRING AND SUMMER, WHEN THE BIRDS ARE HAVING THEIR YOUNG.

MIGRATORY BIRD TREATY ACT 1918

BUT SPRING IS WHEN WE HAVE ALWAYS HUNTED BIRDS!

AND AROUND HERE THE BIRDS LEAVE SOON AFTER FALL TIME COMES. I WONDER WHY THE TREATIES DON'T GIVE US MORE TIME TO HUNT?

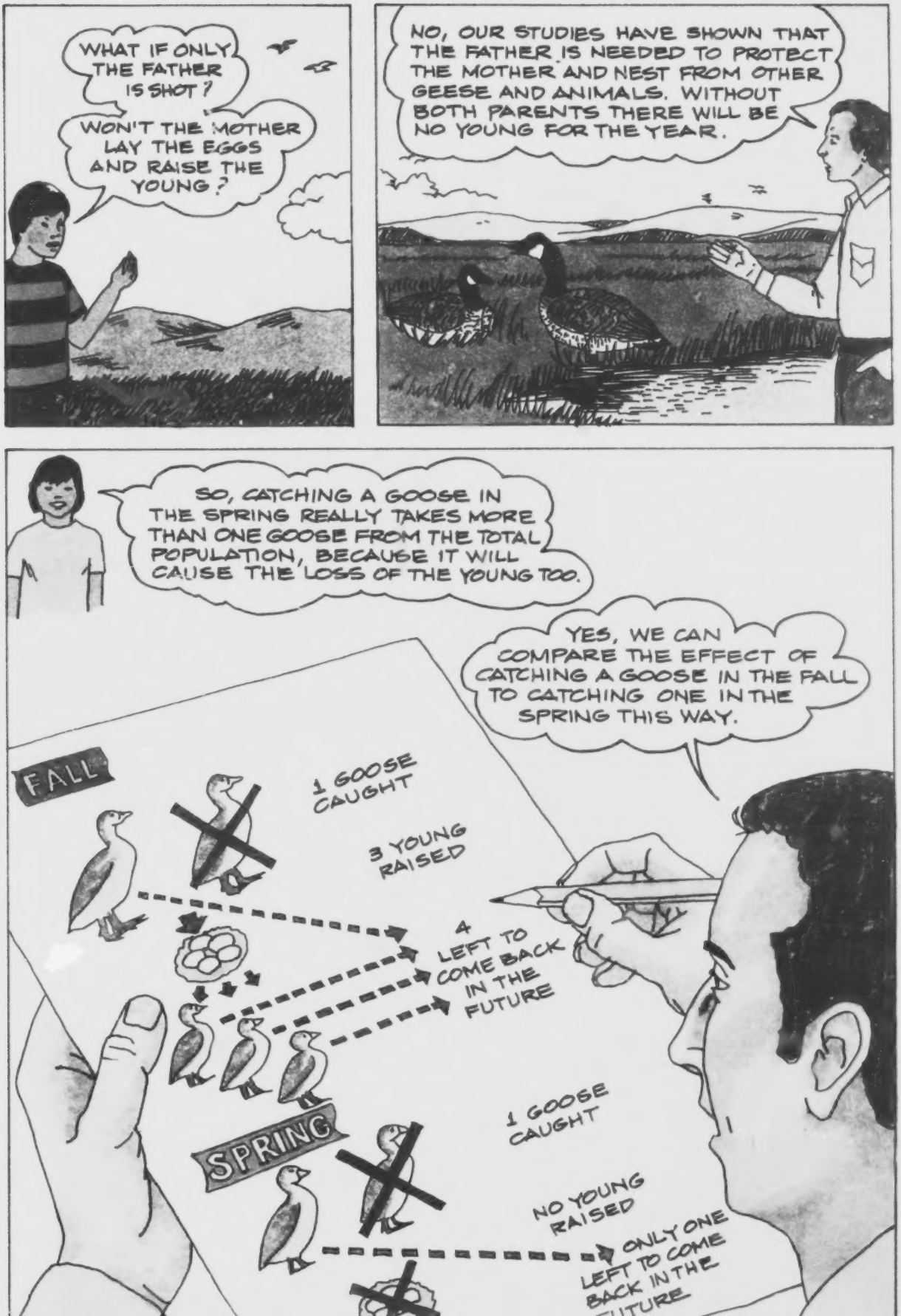

WELL, THE TREATIES WERE MADE A LONG TIME AGO, WHEN THE GOVERNMENT DIDN'T KNOW MUCH ABOUT PEOPLE LIVING IN ALASKAN VILLAGES. THE PEOPLE IN THE VILLAGES DIDN'T KNOW THE TREATIES WERE NEEDED TO PROTECT THE BIRDS.
BUT TODAY THE U.S. FISH AND WILDLIFE SERVICE IS WORKING WITH PEOPLE IN ALASKA AND OTHER PLACES TO CHANGE THE TREATIES, SO HUNTERS IN THE VILLAGES WILL HAVE A LEGAL SPRING SEASON TO HUNT BIRDS.


A SPRING SEASON WOULD HAVE TO BE REGULATED CAREFULLY — BECAUSE CATCHING BIRDS IN THE SPRING IS HARDER ON THEIR POPULATIONS THAN CATCHING THEM IN THE FALL.

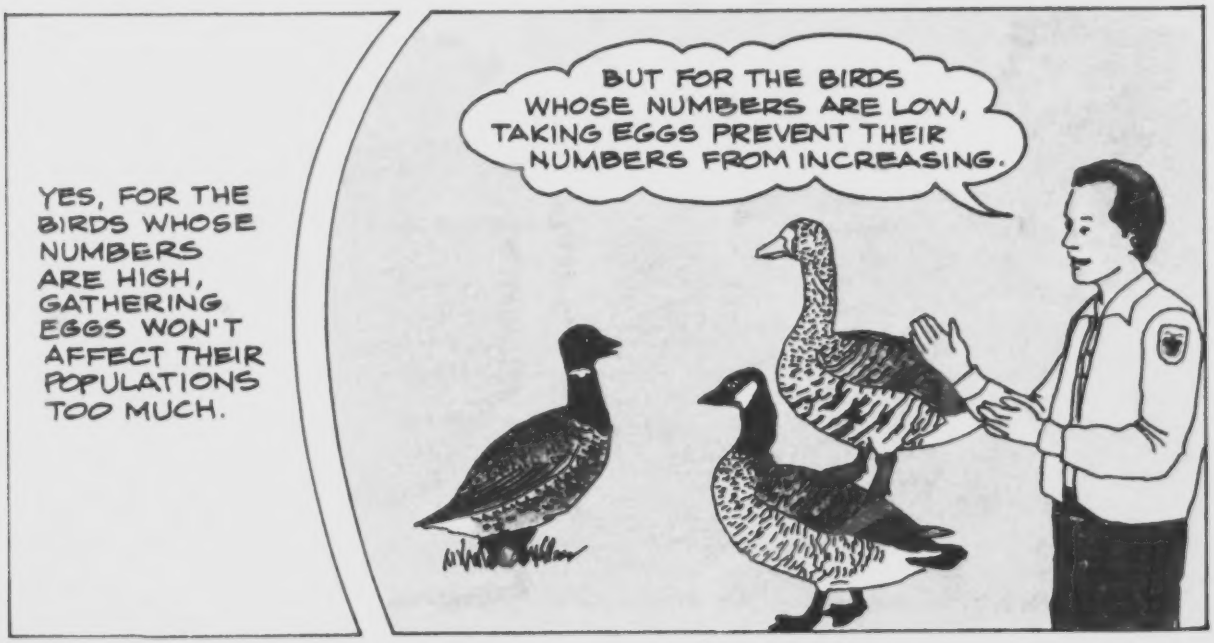
WHY WOULD CATCHING BIRDS IN THE SPRING AFFECT THEIR POPULATIONS MORE?
WHAT IS THE DIFFERENCE?

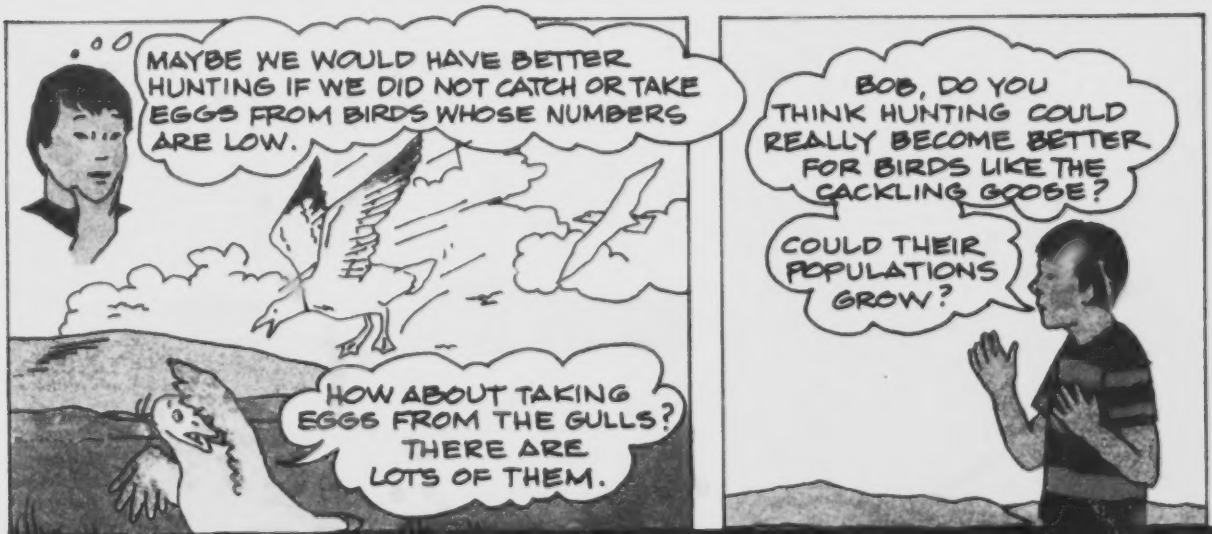
WELL, IN THE FALL, THE BIRDS HAVE ALREADY RAISED THEIR YOUNG. SHOOTING A GOOSE AT THAT TIME TAKES ONLY ONE BIRD FROM THE TOTAL POPULATION.

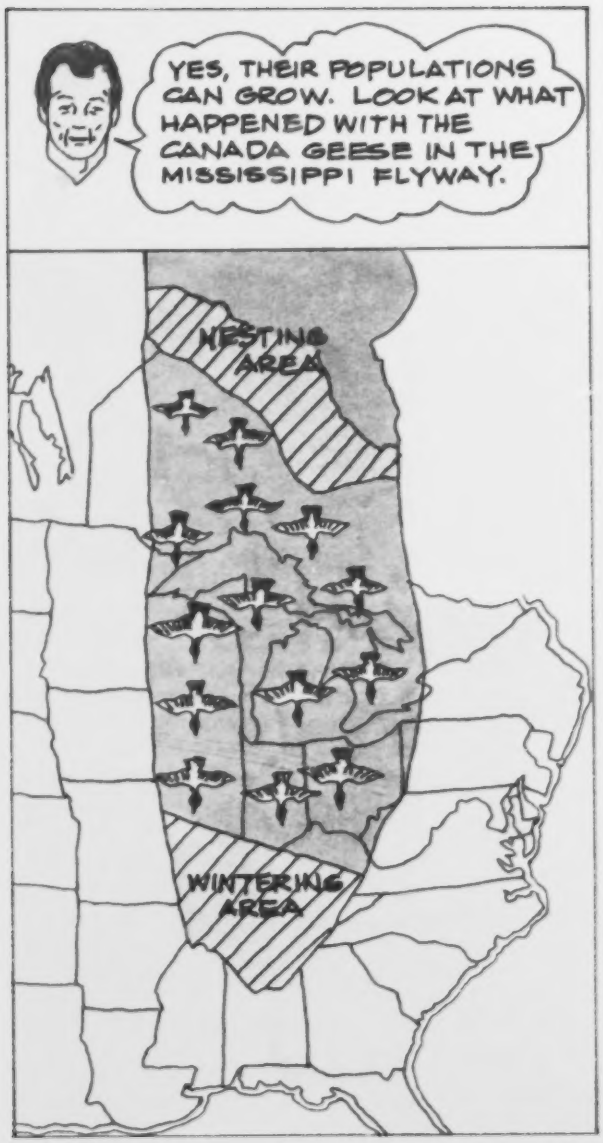
BUT IN THE SPRING THE BIRDS ARE HAVING THEIR YOUNG, AND IF ONE NESTING GOOSE IS CAUGHT, THE PAIR WILL RAISE NO YOUNG THAT YEAR.

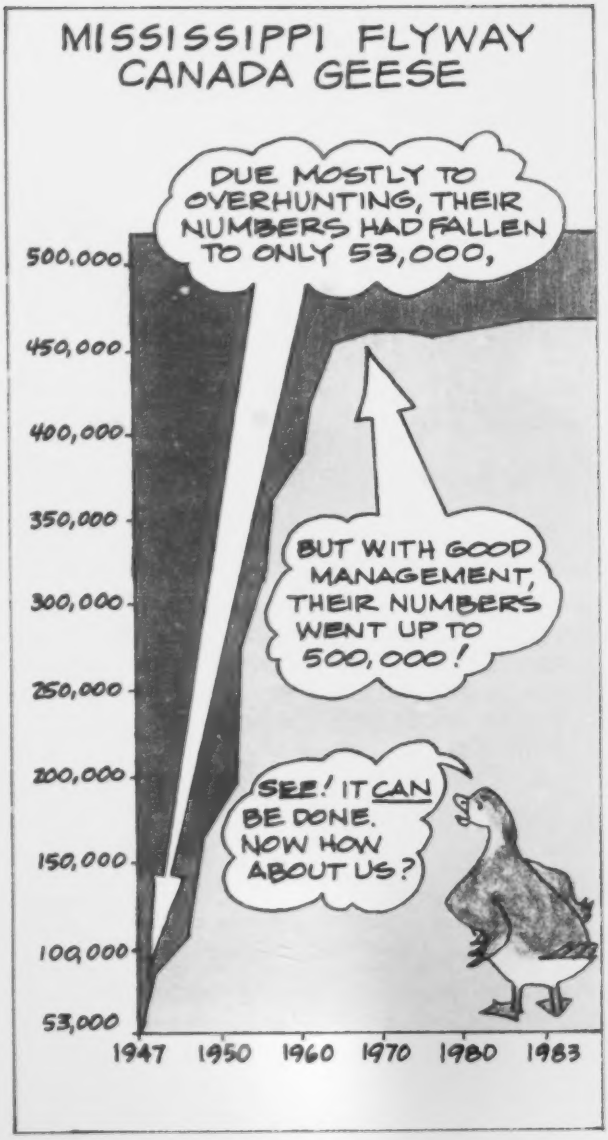

WHAT IF ONLY THE FATHER IS SHOT?
WON'T THE MOTHER LAY THE EGGS AND RAISE THE YOUNG?
NO, OUR STUDIES HAVE SHOWN THAT THE FATHER IS NEEDED TO PROTECT THE MOTHER AND NEST FROM OTHER GEESE AND ANIMALS. WITHOUT BOTH PARENTS THERE WILL BE NO YOUNG FOR THE YEAR.
SO, CATCHING A GOOSE IN THE SPRING REALLY TAKES MORE THAN ONE GOOSE FROM THE TOTAL POPULATION, BECAUSE IT WILL CAUSE THE LOSS OF THE YOUNG TOO.
YES, WE CAN COMPARE THE EFFECT OF CATCHING A GOOSE IN THE FALL TO CATCHING ONE IN THE SPRING THIS WAY.
FALL
1 GOOSE CAUGHT
3 YOUNG RAISED
4 LEFT TO COME BACK IN THE FUTURE
SPRING
1 GOOSE CAUGHT
NO YOUNG RAISED
ONLY ONE LEFT TO COME BACK IN THE FUTURE

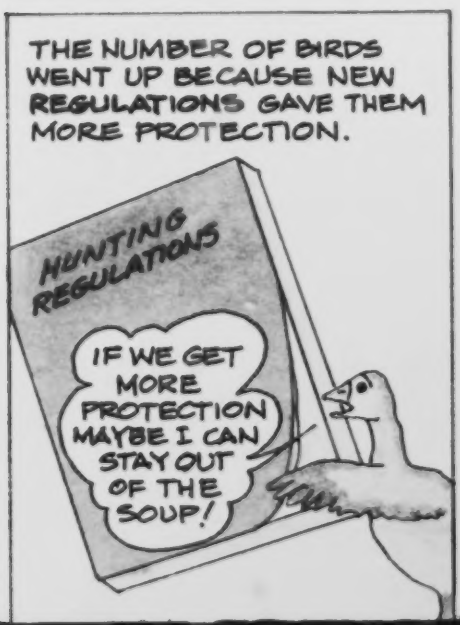
THERE IS ALSO CONCERN ABOUT GETTING EGGS IN THE SPRING.
BUT WE HAVE ALWAYS GATHERED EGGS AND WE ONLY TAKE WHAT WE EAT.

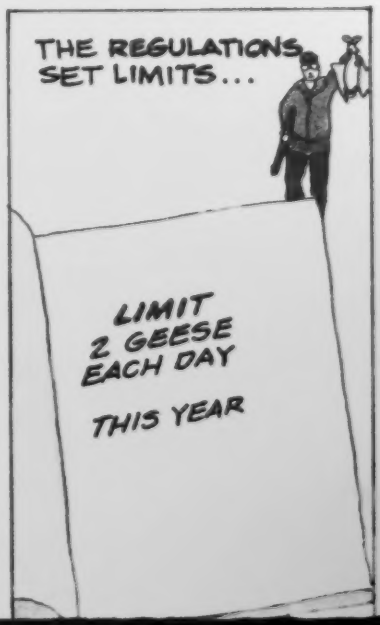

YES, FOR THE BIRDS WHOSE NUMBERS ARE HIGH, GATHERING EGGS WON'T AFFECT THEIR POPULATIONS TOO MUCH.
BUT FOR THE BIRDS WHOSE NUMBERS ARE LOW, TAKING EGGS PREVENT THEIR NUMBERS FROM INCREASING.

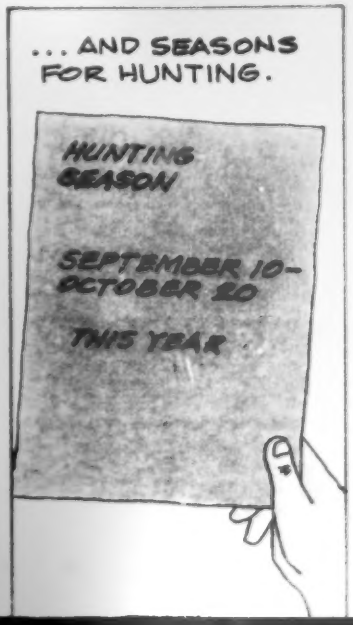

MAYBE WE WOULD HAVE BETTER HUNTING IF WE DID NOT CATCH OR TAKE EGGS FROM BIRDS WHOSE NUMBERS ARE LOW.
HOW ABOUT TAKING EGGS FROM THE GULLS? THERE ARE LOTS OF THEM.
BOB, DO YOU THINK HUNTING COULD REALLY BECOME BETTER FOR BIRDS LIKE THE CACKLING GOOSE?
COULD THEIR POPULATIONS GROW?


YES, THEIR POPULATIONS CAN GROW. LOOK AT WHAT HAPPENED WITH THE CANADA GEESE IN THE MISSISSIPPI FLYWAY.
NESTING AREA
WINTERING AREA

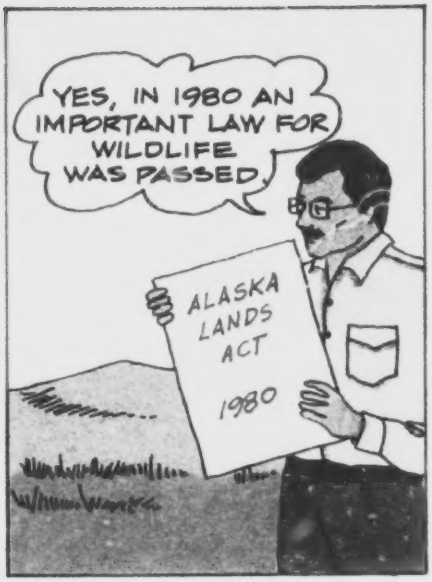

MISSISSIPPI FLYWAY
CANADA GEESE
DUE MOSTLY TO OVERHUNTING, THEIR NUMBERS HAD FALLEN TO ONLY 53,000,
BUT WITH GOOD MANAGEMENT, THEIR NUMBERS WENT UP TO 500,000!
SEE! IT CAN BE DONE. NOW HOW ABOUT US?
500,000
450,000
400,000
350,000
300,000
250,000
200,000
150,000
100,000
53,000
1947
1950
1960
1970
1980
1983

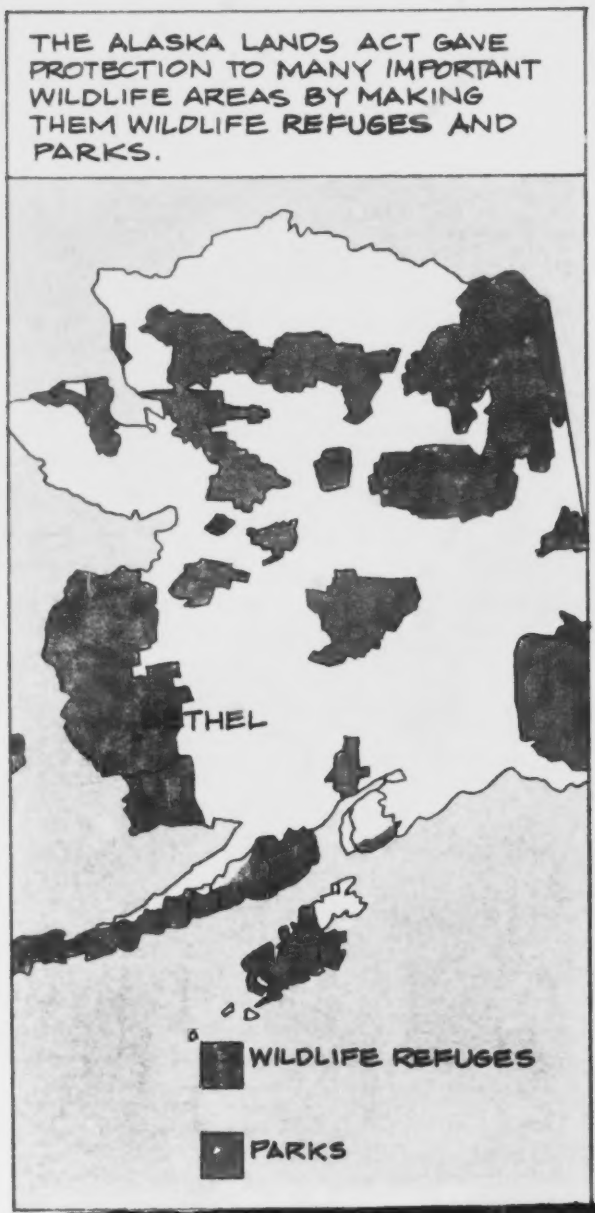

THE NUMBER OF BIRDS WENT UP BECAUSE NEW REGULATIONS GAVE THEM MORE PROTECTION.
HUNTING REGULATIONS
IF WE GET MORE PROTECTION MAYBE I CAN STAY OUT OF THE SOUP!


THE REGULATIONS SET LIMITS...
LIMIT 2 GEESE EACH DAY
THIS YEAR


... AND SEASONS FOR HUNTING.
HUNTING SEASON
SEPTEMBER 10-OCTOBER 20
THIS YEAR

WITH MORE HUNTERS TODAY AND LESS HABITAT, WE NEED HUNTING REGULATIONS SO THERE WILL BE GOOD HUNTING IN THE FUTURE.
II-I, BUT IS ANYTHING BEING DONE TO PROTECT HABITAT FOR WILDLIFE IN ALASKA?


YES, IN 1980 AN IMPORTANT LAW FOR WILDLIFE WAS PASSED.
ALASKA LANDS ACT
1980


THE ALASKA LANDS ACT GAVE PROTECTION TO MANY IMPORTANT WILDLIFE AREAS BY MAKING THEM WILDLIFE REFUGES AND PARKS.
THEL
WILDLIFE REFUGES
PARKS

AND IN OUR AREA THE YUKON DELTA NATIONAL WILDLIFE REFUGE WAS MADE.
MARY'S
MY SUMMER HOME

SUPPOSE WE GO UP IN THE PLANE AND SEE WHAT'S HAPPENING ON THE REFUGE.
I'LL CALL YOUR PARENTS ON THE C.B..
ALA-I!
LET'S GO!

AFTER GETTING THE OK FROM THEIR PARENTS, THEY TAKE OFF...
N710

EACH KIND OF ANIMAL NEEDS ITS OWN KIND OF HABITAT.
AND A MAIN PURPOSE OF THE REFUGE IS TO PROTECT THE DIFFERENT KINDS OF HABITATS...

...LIKE THIS WET TUNDRA.

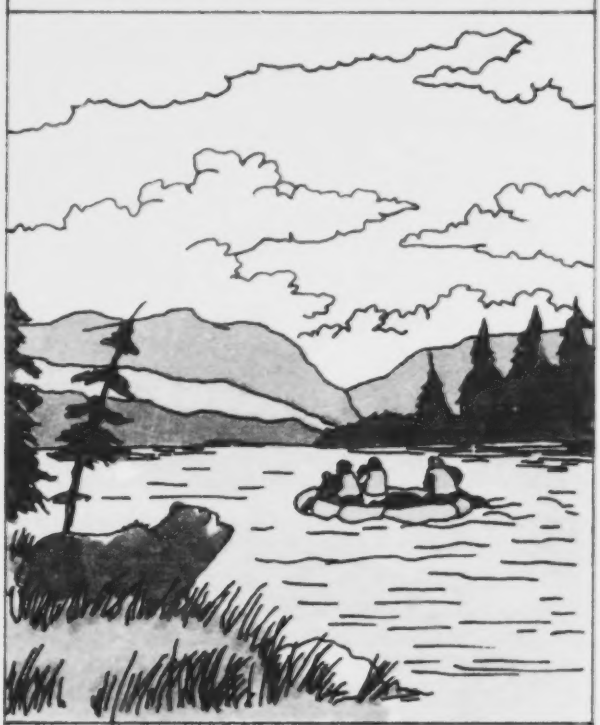
THE COASTAL WETLAND HABITAT SUPPORTS THE HIGHEST NUMBER OF GEESE AND DUCKS.

SEABIRDS NEED THE ROCKY CLIFF HABITATS.

RIVERS PROVIDE HABITAT FOR MANY KINDS OF WILDLIFE.

PROTECTING WATER QUALITY AND PREVENTING POLLUTION ARE ALSO PURPOSES OF THE REFUGE.

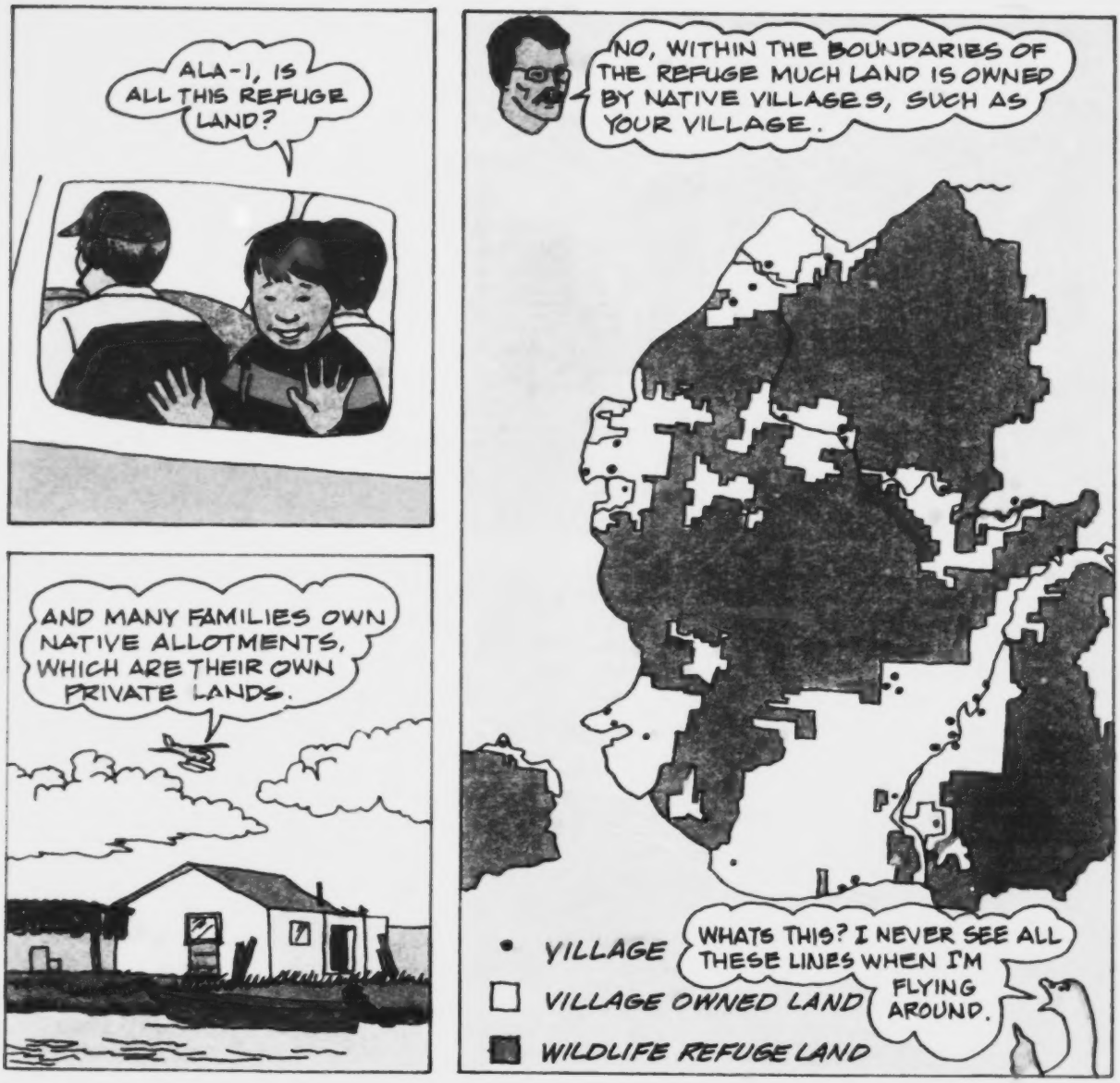
WITHIN THE REFUGE WILDERNESS AREAS RECEIVE EXTRA PROTECTION...

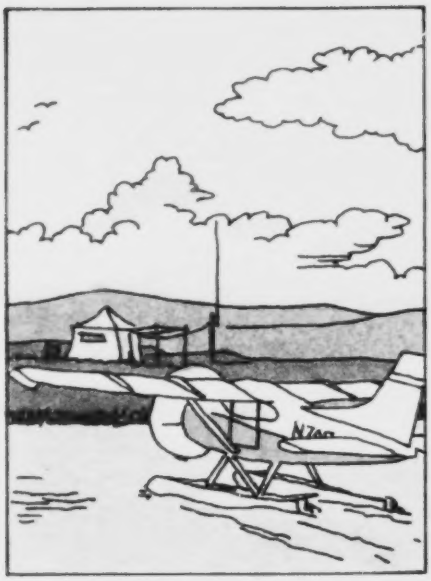


...SO THEIR NATURAL BEAUTY CAN ALWAYS BE ENJOYED.

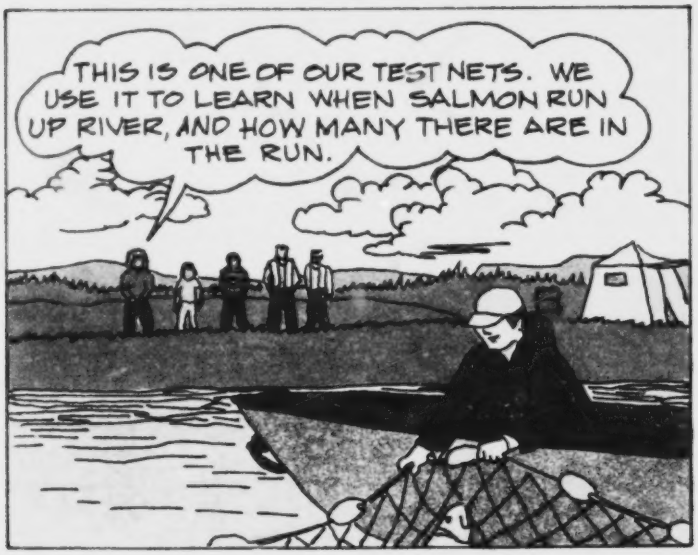
THE U.S. FISH AND WILDLIFE SERVICE WORKS TO PROTECT HABITATS FROM DEVELOPMENTS AND ACTIVITIES THAT WOULD CAUSE DAMAGE.

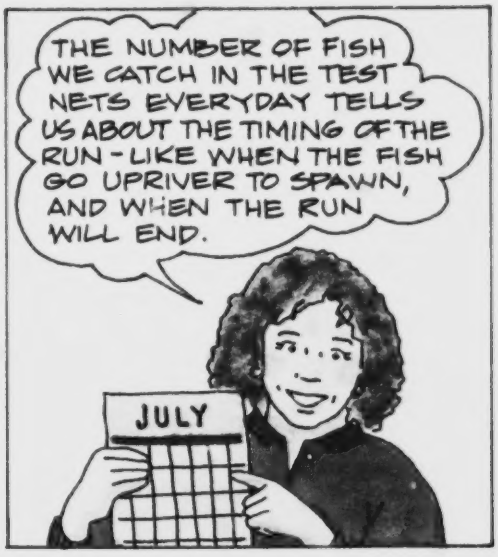
AN IMPORTANT PURPOSE OF THE REFUGE IS TO PROTECT THE OPPORTUNITY FOR SUBSISTENCE USES.


ALA-1, IS ALL THIS REFUGE LAND?
NO, WITHIN THE BOUNDARIES OF THE REFUGE MUCH LAND IS OWNED BY NATIVE VILLAGES, SUCH AS YOUR VILLAGE.
AND MANY FAMILIES OWN NATIVE ALLOTMENTS, WHICH ARE THEIR OWN PRIVATE LANDS.
VILLAGE
VILLAGE OWNED LAND
WILDLIFE REFUGE LAND
WHATS THIS? I NEVER SEE ALL THESE LINES WHEN I'M FLYING AROUND.
SO IT IS IMPORTANT THAT THE VILLAGES, INDIVIDUALS AND THE U.S. FISH AND WILDLIFE SERVICE WORK TOGETHER IN MANAGING THE LAND.
THIS IS WHERE THE ALASKA DEPARTMENT OF FISH AND GAME HAS A TEST NET.
WE'LL GO DOWN AND SEE WHAT THEY ARE DOING.
N7140

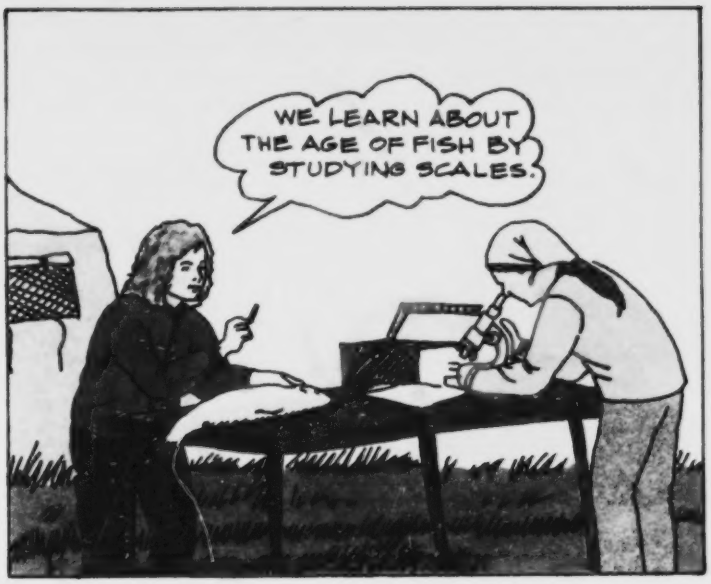

N7aa

HI AMY! THIS IS SIMON AND MARY. CAN YOU TELL US ABOUT WHAT YOU ARE DOING?
SURE, I WORK FOR THE ALASKA DEPARTMENT OF FISH AND GAME. MY JOB IS TO CONDUCT STUDIES OF SALMON.

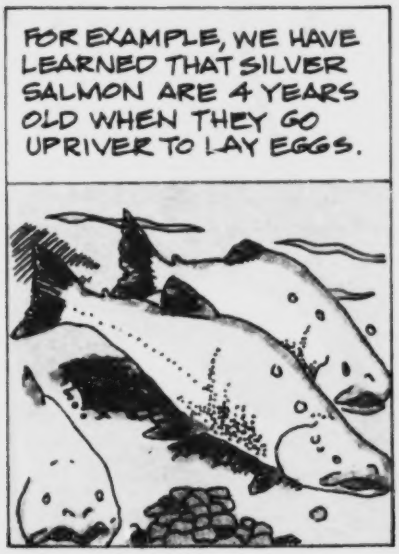

THIS IS ONE OF OUR TEST NETS. WE USE IT TO LEARN WHEN SALMON RUN UP RIVER, AND HOW MANY THERE ARE IN THE RUN.


THE NUMBER OF FISH WE CATCH IN THE TEST NETS EVERYDAY TELLS US ABOUT THE TIMING OF THE RUN - LIKE WHEN THE FISH GO UPRIVER TO SPAWN, AND WHEN THE RUN WILL END.
JULY

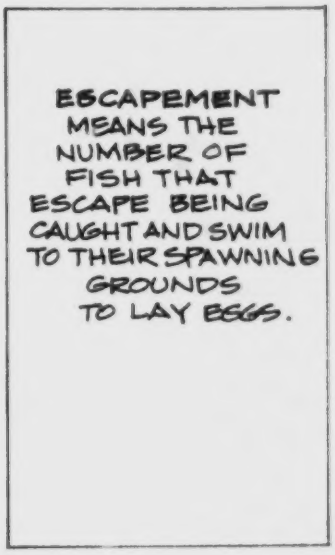
DOES IT TELL HOW MANY FISH THERE ARE?
NOT EXACTLY, BUT IT GIVES US AN ESTIMATE OF THE TOTAL NUMBER OF FISH...
...AND WE CAN COMPARE THE TIMING AND NUMBERS OF FISH WE CATCH THIS YEAR WITH THE TIMING AND NUMBERS OF FISH FROM OTHER YEARS.
I'M GLAD THEY DON'T HAVE TO CATCH US TO COUNT US.


WE LEARN ABOUT THE AGE OF FISH BY STUDYING SCALES.

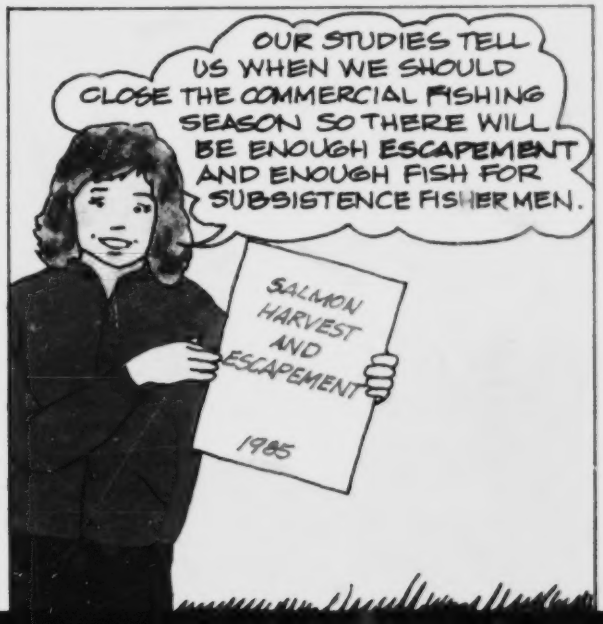
THE NUMBER OF RINGS ON THE SCALE TELLS US HOW OLD THE FISH IS.
THE ONLY RING I HAVE IS A U.S. FISH AND WILDLIFE SERVICE BAND.


FOR EXAMPLE, WE HAVE LEARNED THAT SILVER SALMON ARE 4 YEARS OLD WHEN THEY GO UPRIVER TO LAY EGGS.

IF ENOUGH FISH ESCAPE FISHERMEN'S NETS AND LAY EGGS THIS YEAR, THEN IN 4 YEARS WE WILL HAVE A GOOD SEASON.


ESCAPEMENT MEANS THE NUMBER OF FISH THAT ESCAPE BEING CAUGHT AND SWIM TO THEIR SPAWNING GROUNDS TO LAY EGGS.

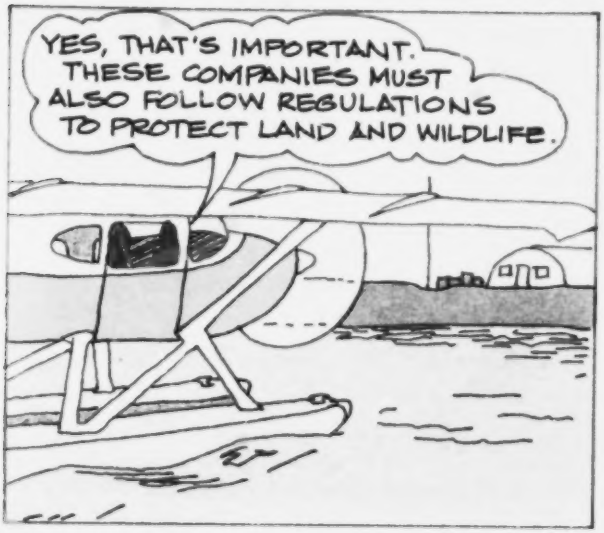
IT'S IMPORTANT TO HAVE GOOD ESCAPEMENT SO WE WILL HAVE GOOD FISHING IN THE FUTURE.
YES, MAKING SURE THERE WILL ALWAYS BE ENOUGH FISH IS OUR MOST IMPORTANT JOB.

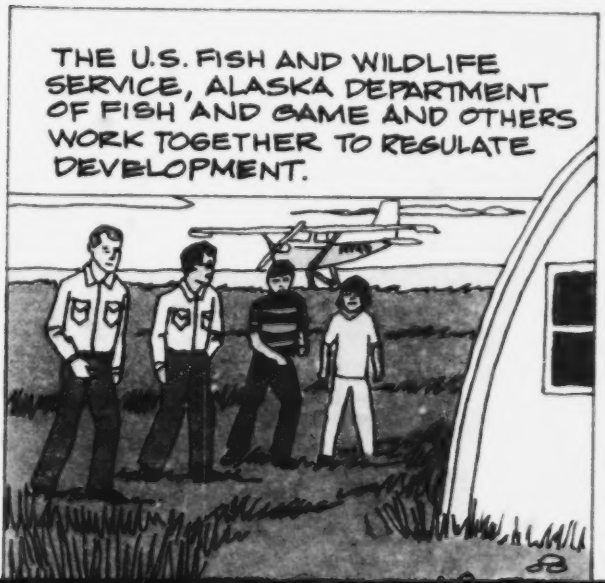

OUR STUDIES TELL US WHEN WE SHOULD CLOSE THE COMMERCIAL FISHING SEASON SO THERE WILL BE ENOUGH ESCAPEMENT AND ENOUGH FISH FOR SUBSISTENCE FISHERMEN.
SALMON HARVEST AND ESCAPEMENT
1985

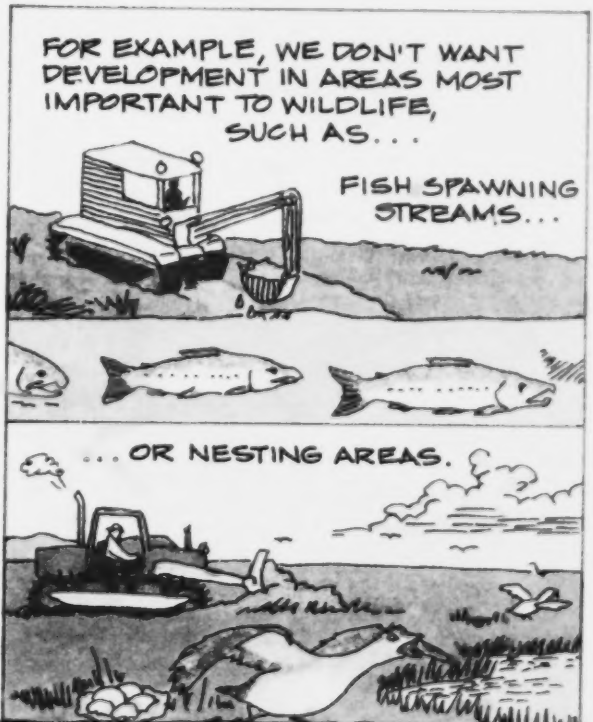
WHAT IS THE DIFFERENCE BETWEEN COMMERCIAL FISHING AND SUBSISTENCE FISHING?
COMMERCIAL FISHING IS WHEN FISH ARE CAUGHT TO BE SOLD.
SUBSISTENCE FISHING IS WHEN PEOPLE CATCH FISH FOR THEIR OWN USE.
SUBSISTENCE FISHING IS VERY IMPORTANT. WE REGULATE THE COMMERCIAL SEASON AND LIMIT SO SUBSISTENCE FISHERMEN HAVE THE BEST CHANCE TO GET THE FISH THAT THEY NEED.
GEE, YOU WORK FOR THE ALASKA DEPARTMENT OF FISH AND GAME AND BOB AND FRED WORK FOR THE U.S. FISH AND WILDLIFE SERVICE...
HOW ARE THE TWO AGENCIES DIFFERENT?
THE ALASKA DEPARTMENT OF FISH AND GAME IS A STATE AGENCY. IT'S MOST IMPORTANT JOB IS TO CONSERVE POPULATIONS OF RESIDENT WILDLIFE, WHICH IS WILDLIFE THAT LIVES WITHIN THE STATE.
ALASKA
DEPARTMENT OF FISH AND GAME
THE U.S. FISH AND WILDLIFE SERVICE IS A FEDERAL AGENCY. IT'S MAIN JOBS ARE TO MANAGE LAND AND HABITAT IN WILDLIFE REFUGES AND TO CONSERVE POPULATIONS OF MIGRATORY BIRDS.
U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR
WILDLIFE REFUGE

WE SHOULD BE ON OUR WAY. WE'RE GOING TO VISIT AN OIL EXPLORATION CAMP NEXT.

THERE IS THE OIL COMPANY CAMP.
FROM THERE THEY EXPLORE FOR OIL UNDER THE OCEAN AND ON LAND.
I HOPE THEY ARE CAREFUL WITH THE WILDLIFE AND HABITAT.


YES, THAT'S IMPORTANT. THESE COMPANIES MUST ALSO FOLLOW REGULATIONS TO PROTECT LAND AND WILDLIFE.

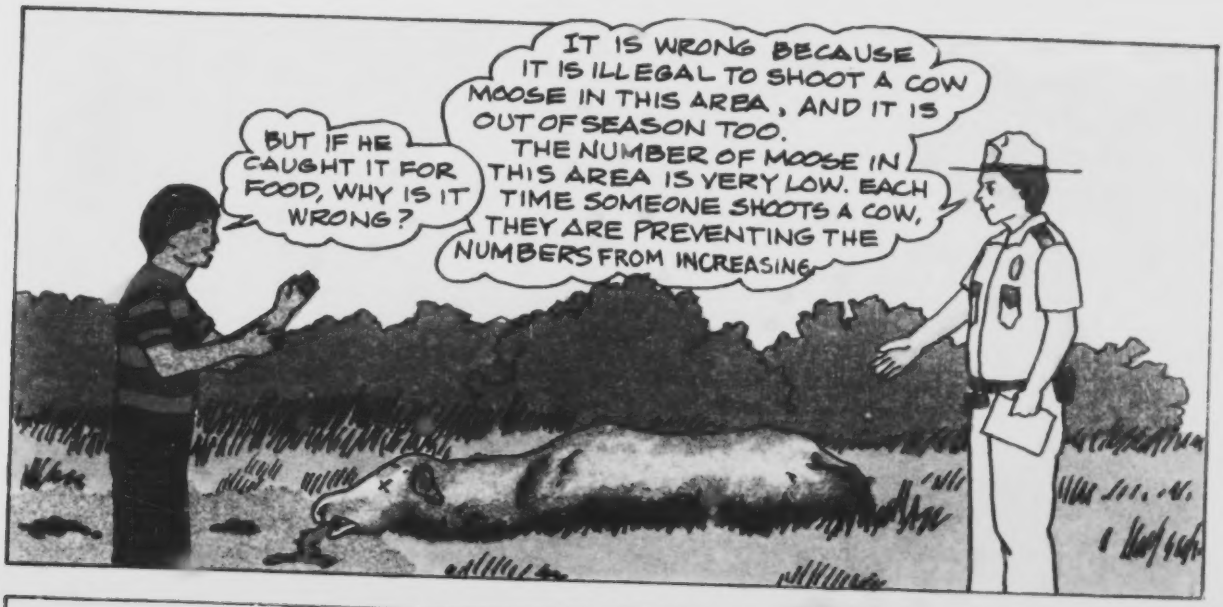

THE U.S. FISH AND WILDLIFE SERVICE, ALASKA DEPARTMENT OF FISH AND GAME AND OTHERS WORK TOGETHER TO REGULATE DEVELOPMENT.

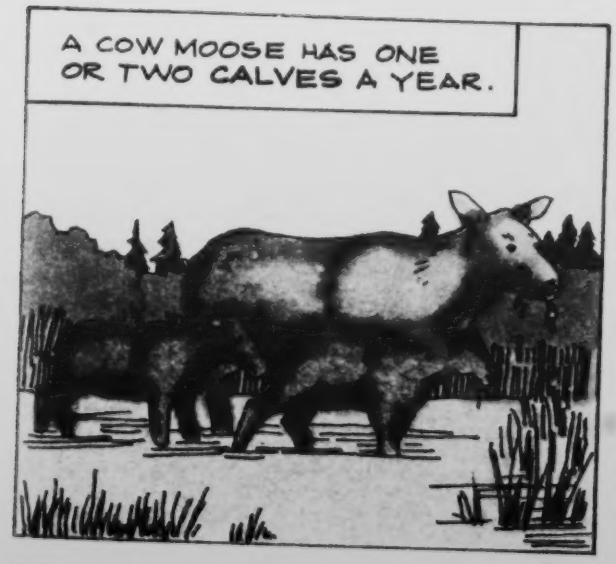

FOR EXAMPLE, WE DON'T WANT DEVELOPMENT IN AREAS MOST IMPORTANT TO WILDLIFE, SUCH AS...
FISH SPAWNING STREAMS...
...OR NESTING AREAS.

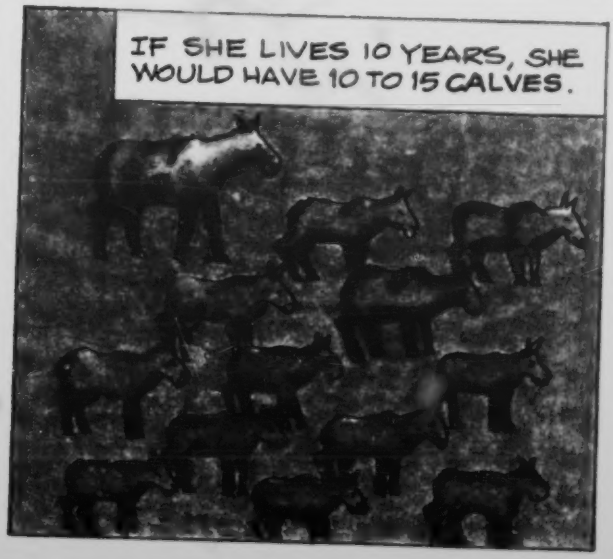
AWK! THEY NEED TO KEEP THOSE DARN WHIRLYBIRDS OUT OF OUR NESTING AREAS TOO.
THIS IS JOANN FROM THE ALASKA DEPARTMENT OF FISH AND GAME SUBSISTENCE DIVISION.
HI JOANN, WHAT ARE YOU DOING HERE?
I HAVE BEEN WORKING IN NEARBY VILLAGES. I AM LEARNING FROM PEOPLE WHICH AREAS THEY USE FOR HUNTING, TRAPPING AND FISHING.
WE MAKE MAPS THAT SHOW AREAS THAT PEOPLE USE FOR DIFFERENT SUBSISTENCE ACTIVITIES.
GOOSE HUNTING
BEAVER TRAPPING
SEAL HUNTING
SALMON FISHING
CAMP
BELUGA
BERRY PICKING
WHEN WE LEARN WHICH AREAS ARE USED BY THE PEOPLE, WE CAN TRY TO GIVE THEM SPECIAL PROTECTION IF DEVELOPMENT WILL OCCUR.
AND OUR STUDIES OF WILDLIFE ALSO TELL WHICH AREAS NEED EXTRA PROTECTION AND REGULATIONS.
DOES THAT MEAN OUR WILDLIFE WILL BE SAFE IF THERE IS DEVELOPMENT?

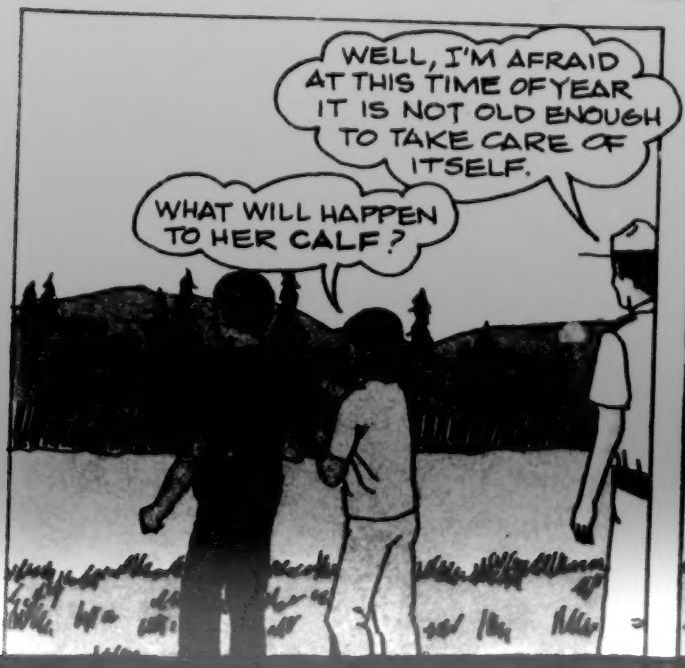
ANYTIME WE CHANGE THE LAND THERE IS DANGER THAT WILDLIFE AND THE VILLAGES WILL BE AFFECTED. FOR EXAMPLE...
...IF A MISTAKE IS MADE, OIL COULD BE SPILLED INTO THE OCEAN...
...AND WILDLIFE HABITATS AND RESOURCES PEOPLE USE COULD BE DAMAGED.
I GUESS I WON'T GO FOR A SWIM TODAY.
AND SMALL ANIMALS NEEDED FOR FOOD COULD BE POISONED.
ALA-I, IF THERE IS A CHANCE WILDLIFE COULD BE HURT, MAYBE THEY SHOULD NOT LOOK FOR OIL.
THERE ARE MANY WHO ARE CONCERNED LIKE YOU.
THE DECISIONS MUST BE MADE WITH EVERYONE'S INTERESTS IN MIND. IF THERE IS DEVELOPMENT OUR INFORMATION WILL HELP PROTECT THE LAND, WILDLIFE AND AREAS PEOPLE USE.
AND PEOPLE SHOULD EXPRESS THEIR CONCERNS AND IDEAS.

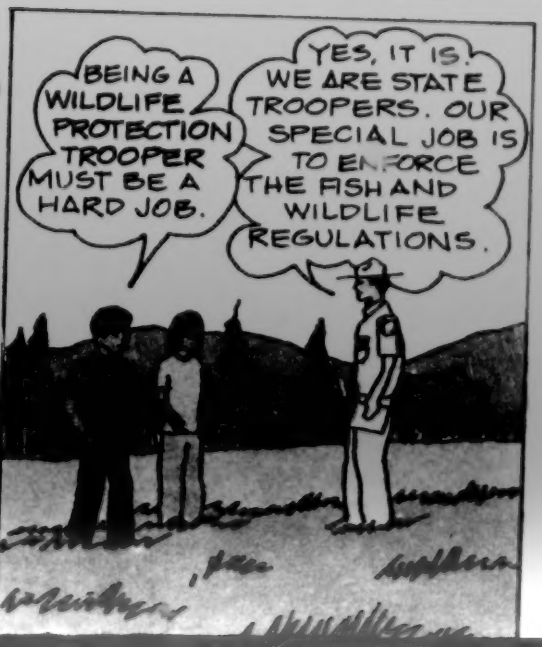
WELL JOANN, WE HAD BETTER BE ON OUR WAY.
PIURAA
AFTER FLYING FOR A WHILE...
LOOK! THERE IS A PLANE DOWN THERE... AND A BOAT.
AND SOMETHING ELSE TOO.
LET'S GO DOWN AND SEE.
IT LOOKS LIKE THE WILDLIFE PROTECTION TROOPER IS TALKING TO SOMEONE.
YOU MEAN THE GAME WARDEN?
YES, HE IS ALSO CALLED THAT.
HI DAVE. WHAT IS HAPPENING?
I HAVE GIVEN THIS MAN A VIOLATION NOTICE FOR SHOOTING THIS COW MOOSE OUT-OF-SEASON.

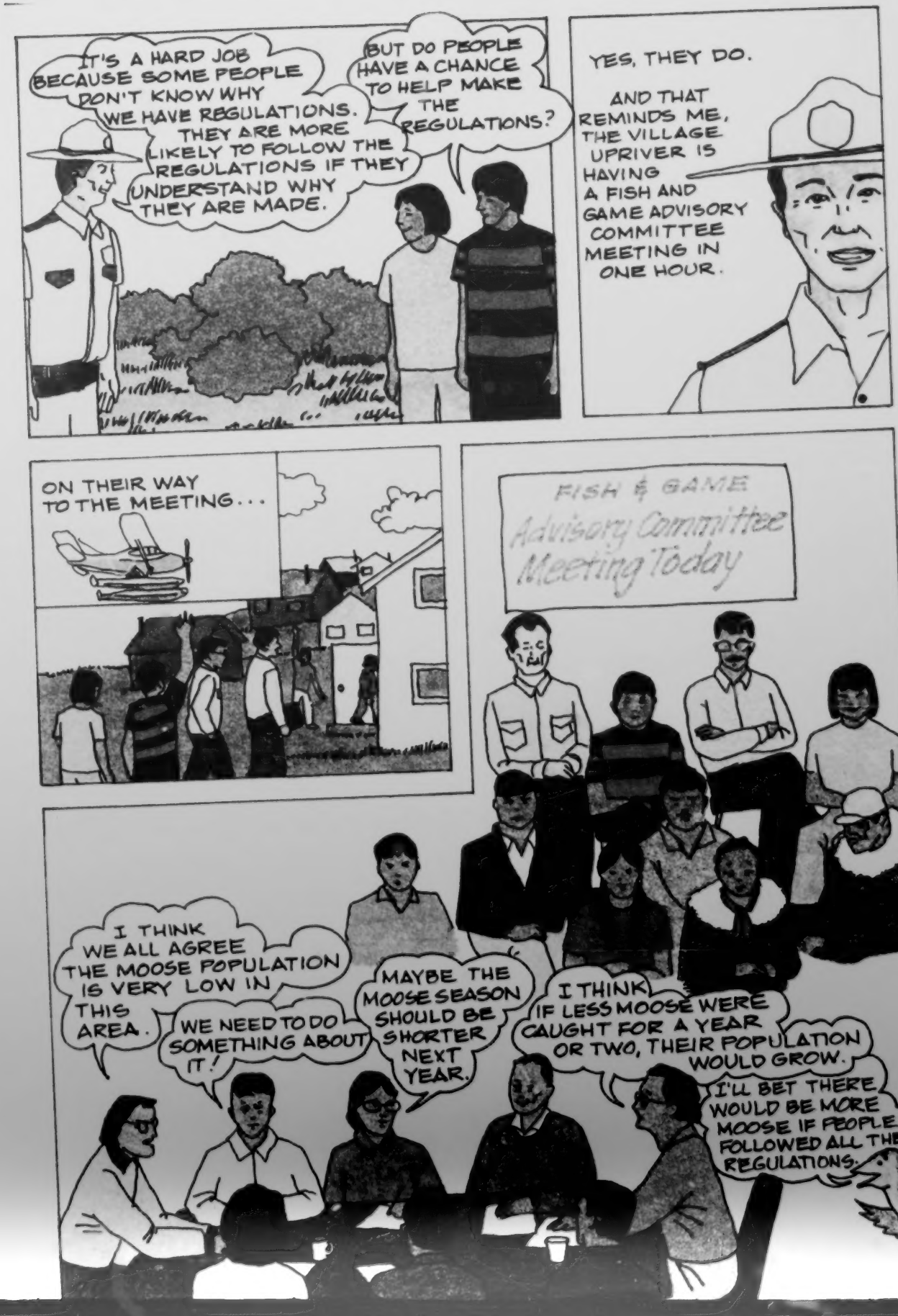

BUT IF HE CAUGHT IT FOR FOOD, WHY IS IT WRONG?
IT IS WRONG BECAUSE IT IS ILLEGAL TO SHOOT A COW MOOSE IN THIS AREA, AND IT IS OUT OF SEASON TOO. THE NUMBER OF MOOSE IN THIS AREA IS VERY LOW. EACH TIME SOMEONE SHOOTS A COW, THEY ARE PREVENTING THE NUMBERS FROM INCREASING.


A COW MOOSE HAS ONE OR TWO CALVES A YEAR.


IF SHE LIVES 10 YEARS, SHE WOULD HAVE 10 TO 15 CALVES.

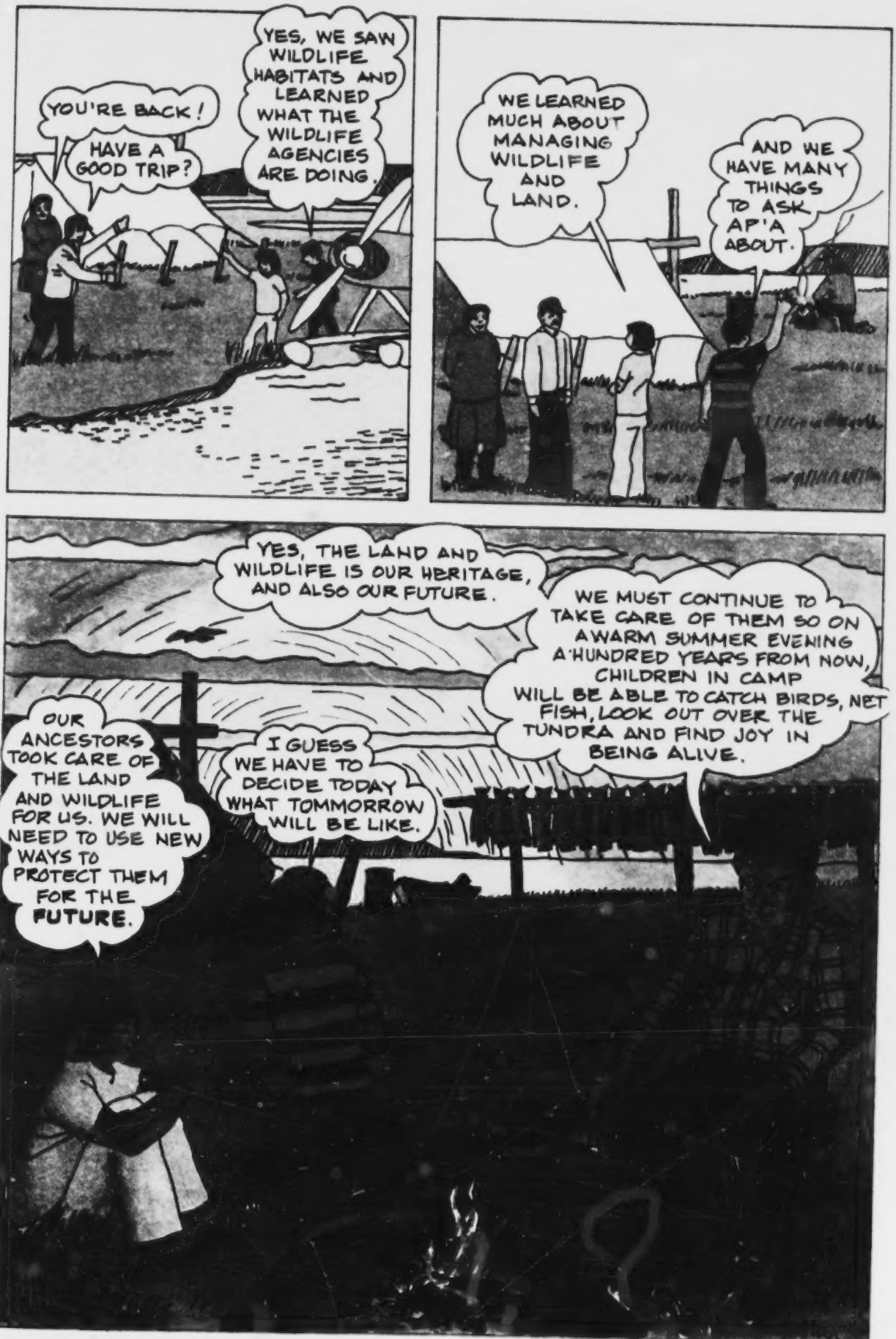

WELL, I'M AFRAID AT THIS TIME OF YEAR IT IS NOT OLD ENOUGH TO TAKE CARE OF ITSELF.
WHAT WILL HAPPEN TO HER CALF?


BEING A WILDLIFE PROTECTION TROOPER MUST BE A HARD JOB.
YES, IT IS! WE ARE STATE TROOPERS. OUR SPECIAL JOB IS TO ENFORCE THE FISH AND WILDLIFE REGULATIONS.

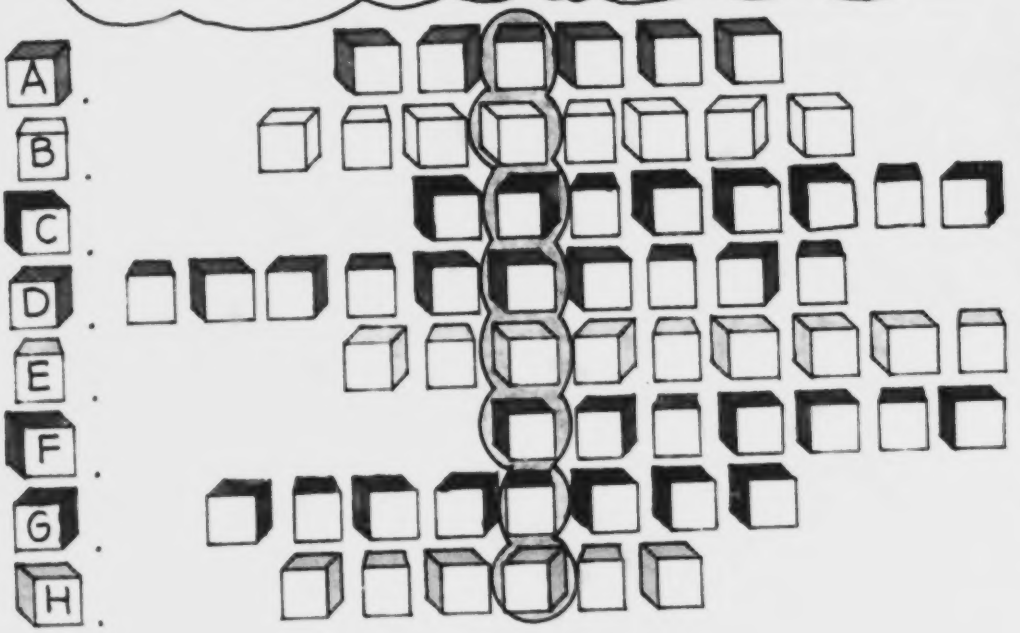

IT'S A HARD JOB BECAUSE SOME PEOPLE DON'T KNOW WHY WE HAVE REGULATIONS. THEY ARE MORE LIKELY TO FOLLOW THE REGULATIONS IF THEY UNDERSTAND WHY THEY ARE MADE.
BUT DO PEOPLE HAVE A CHANCE TO HELP MAKE THE REGULATIONS?
YES, THEY DO.
AND THAT REMINDS ME, THE VILLAGE UPRIVER IS HAVING A FISH AND GAME ADVISORY COMMITTEE MEETING IN ONE HOUR.
ON THEIR WAY TO THE MEETING...
FISH & GAME
Advisory Committee
Meeting Today
I THINK WE ALL AGREE THE MOOSE POPULATION IS VERY LOW IN THIS AREA.
WE NEED TO DO SOMETHING ABOUT IT!
MAYBE THE MOOSE SEASON SHOULD BE SHORTER NEXT YEAR.
I THINK IF LESS MOOSE WERE CAUGHT FOR A YEAR OR TWO, THEIR POPULATION WOULD GROW.
I'LL BET THERE WOULD BE MORE MOOSE IF PEOPLE FOLLOWED ALL THE REGULATIONS.

THE FISH AND GAME ADVISORY COMMITTEE IS MADE UP OF PEOPLE FROM DIFFERENT VILLAGES IN THE REGION. THEY MEET SEVERAL TIMES EACH YEAR TO DISCUSS WILDLIFE REGULATIONS.
AFTER TALKING THINGS OVER, THEY DECIDE WHAT NEW STATE REGULATIONS ARE NEEDED FOR THEIR REGION.
THEY THEN SEND THE NEW REGULATIONS THEY WOULD LIKE TO THE ALASKA BOARD OF GAME.
WHAT'S THE BOARD OF GAME?
IT'S A GROUP OF PEOPLE FROM DIFFERENT AREAS OF THE STATE WHO ARE APPOINTED BY THE GOVERNOR TO MAKE REGULATIONS ABOUT THE CONSERVATION AND USE OF WILDLIFE.
THEY MEET EACH YEAR TO CONSIDER CHANGES IN STATE REGULATIONS. THEY CONSIDER COMMENTS FROM PEOPLE, WILDLIFE AGENCIES AND GROUPS, THEN DECIDE WHICH REGULATIONS TO MAKE.
I HOPE THE BOARD OF GAME MAKES THE REGULATIONS OUR LOCAL ADVISORY COMMITTEE WANTS.
I BET THEY WILL BECAUSE IT WILL HELP INCREASE MOOSE.
AFTER THE MEETING...
GEE, PEOPLE CAN HELP MAKE REGULATIONS. THEY CAN BE INVOLVED IN MANAGING WILDLIFE.
YES. IT'S IMPORTANT THAT THE PEOPLE ARE INVOLVED.

I-I, WILDLIFE NEEDS HELP FROM EVERYONE -- WORKING TOGETHER!
AND YOU CAN HELP WILDLIFE BY USING THE THINGS YOU LEARNED TODAY.
I WOULD LIKE TO GET A JOB WITH A WILDLIFE AGENCY SOMEDAY.
THERE ARE JOB OPPORTUNITIES FOR YOUNG PEOPLE FROM VILLAGES.
RETURNING TO CAMP...


YOU'RE BACK!
HAVE A GOOD TRIP?
YES, WE SAW WILDLIFE HABITATS AND LEARNED WHAT THE WILDLIFE AGENCIES ARE DOING.
WE LEARNED MUCH ABOUT MANAGING WILDLIFE AND LAND.
AND WE HAVE MANY THINGS TO ASK AP'A ABOUT.
YES, THE LAND AND WILDLIFE IS OUR HERITAGE, AND ALSO OUR FUTURE.
WE MUST CONTINUE TO TAKE CARE OF THEM SO ON A WARM SUMMER EVENING A HUNDRED YEARS FROM NOW, CHILDREN IN CAMP WILL BE ABLE TO CATCH BIRDS, NET FISH, LOOK OUT OVER THE TUNDRA AND FIND JOY IN BEING ALIVE.
OUR ANCESTORS TOOK CARE OF THE LAND AND WILDLIFE FOR US. WE WILL NEED TO USE NEW WAYS TO PROTECT THEM FOR THE FUTURE.
I GUESS WE HAVE TO DECIDE TODAY WHAT TOMMORROW WILL BE LIKE.

HERE IS A WORD PUZZLE WITH A BUBBLE WORD. COMPLETE EACH SENTENCE BELOW WITH A WORD FROM THE LIST. THEN PUT THE WORD IN THE ROW OF BOXES WITH THE SAME COLOR.



A. IF WE TAKE CARE OF WILDLIFE TODAY, THERE WILL BE WILDLIFE FOR PEOPLE OF THE _____.

B. A FISH AND WILDLIFE _____ JOB IS TO ENFORCE THE FISH AND WILDLIFE REGULATIONS.

C. TWO OF OUR _____ THAT WORK WITH WILDLIFE ARE THE U.S. FISH AND WILDLIFE SERVICE AND THE ALASKA DEPARTMENT OF FISH & GAME.

D. _____ MEANS THE NUMBER OF FISH THAT ESCAPE BEING CAUGHT AND SWIM UPRIVER TO THEIR SPAWNING AREA.

E. DUCKS, GEESE AND SWANS ARE _____.

F. TODAY THERE ARE MORE _____ BUT NOT MORE BIRDS.

G. WE CAN _____ OUR GEESE BY NOT CATCHING TOO MANY AND BY PROTECTING THEIR HABITAT.

H. WATERFOWL ARE A _____ RESOURCE; THEY BELONG TO PEOPLE HERE AND TO PEOPLE FURTHER SOUTH.

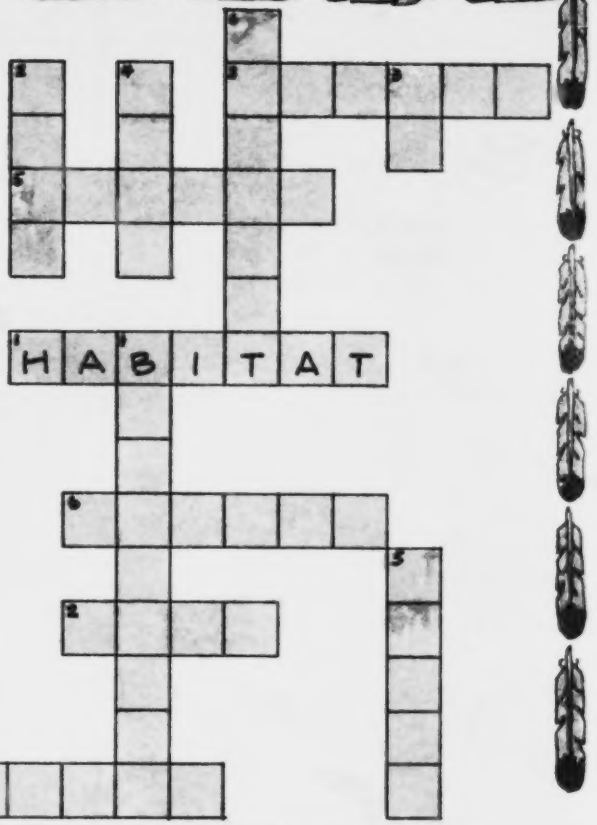
BUBBLE WORD:

WILDLIFE NEEDS EVERYONE WORKING _____.

LIST:

WATERFOWL	SHARED	TROOPERS
CONSERVE	HUNTERS	TOGETHER
ESCAPEMENT	FUTURE	AGENCIES

CAN YOU SOLVE THIS? EACH SENTENCE BELOW CAN BE COMPLETED WITH ONE WORD FROM THE LIST. THEN SEE IF YOU CAN FIT EACH WORD INTO THE PUZZLE AT THE RIGHT. I FILLED ONE IN TO GET YOU STARTED.



FLYWAY	MIGRATE
U.S.	BIOLOGIST
LIMITS	BANDS
EGGS	REFUGE
GAME	CALF
PROTECT	HABITAT

ACROSS:

1. AN ANIMALS HABITAT IS ITS HOME, WHERE IT HAS THE KIND OF FOOD, COVER AND WATER IT NEEDS.
2. WE SHOULD NOT TAKE _____ FROM BIRDS WHOSE NUMBERS ARE LOW.
3. THE YUKON DELTA WILDLIFE _____ PROTECTS WILDLIFE AND HABITAT.
4. MOST BIRDS IN OUR AREA _____ SOUTH IN THE FALL AND RETURN IN THE SPRING.
5. HUNTING REGULATIONS SET _____ ON THE NUMBER OF BIRDS THAT CAN BE CAUGHT.
6. GEESE FROM THE YUKON DELTA MIGRATE ALONG A ROUTE CALLED THE PACIFIC _____.

DOWN:

1. BOB IS A _____; HIS JOB IS TO STUDY AND MANAGE WILDLIFE.
2. IF A COW MOOSE IS CAUGHT IN THE SPRING, HER _____ WILL NOT LIVE.
3. THE ____ FISH AND WILDLIFE SERVICE MANAGES WATERFOWL AND REFUGES.
4. THE ALASKA DEPARTMENT OF FISH AND _____ WORKS MOSTLY TO CONSERVE WILDLIFE THAT STAYS WITHIN ALASKA.
5. BIOLOGISTS PUT _____ ON THE BIRD'S LEGS TO LEARN WHERE THEY MIGRATE.
6. REGULATIONS ARE MADE TO _____ WILDLIFE AND HABITAT.

OUR WILDLIFE AGENCIES

THE U.S. FISH AND WILDLIFE SERVICE IS OUR NATION'S MAIN CONSERVATION AGENCY. IT'S MOST IMPORTANT JOBS ARE TO CONSERVE POPULATIONS OF MIGRATORY BIRDS THROUGHOUT THE NATION, MANAGE WILDLIFE REFUGES, HELP PROTECT OTHER WILDLIFE HABITATS, CONDUCT STUDIES OF WILDLIFE, HELP ENDANGERED SPECIES, AND ENFORCE FEDERAL WILDLIFE LAWS.

THE ALASKA DEPARTMENT OF FISH AND GAME IS OUR STATE CONSERVATION AGENCY. IT'S PRIMARY DUTY IS TO MANAGE AND CONSERVE POPULATIONS OF BIRDS, MAMMALS, AND FISH IN ALASKA FOR THE BENEFIT OF ALL CITIZENS. IT ALSO WORKS TO PROTECT WILDLIFE AND FISH HABITATS AND GATHER INFORMATION ON SUBSISTENCE USES OF WILDLIFE.

THE DIVISION OF FISH AND WILDLIFE PROTECTION IS PART OF THE ALASKA DEPARTMENT OF PUBLIC SAFETY (STATE TROOPERS). IT'S MAIN JOB IS TO INFORM PEOPLE OF THE HUNTING, FISHING, AND TRAPPING REGULATIONS AND LAWS AND TO APPREHEND PEOPLE WHO VIOLATE THE LAWS.